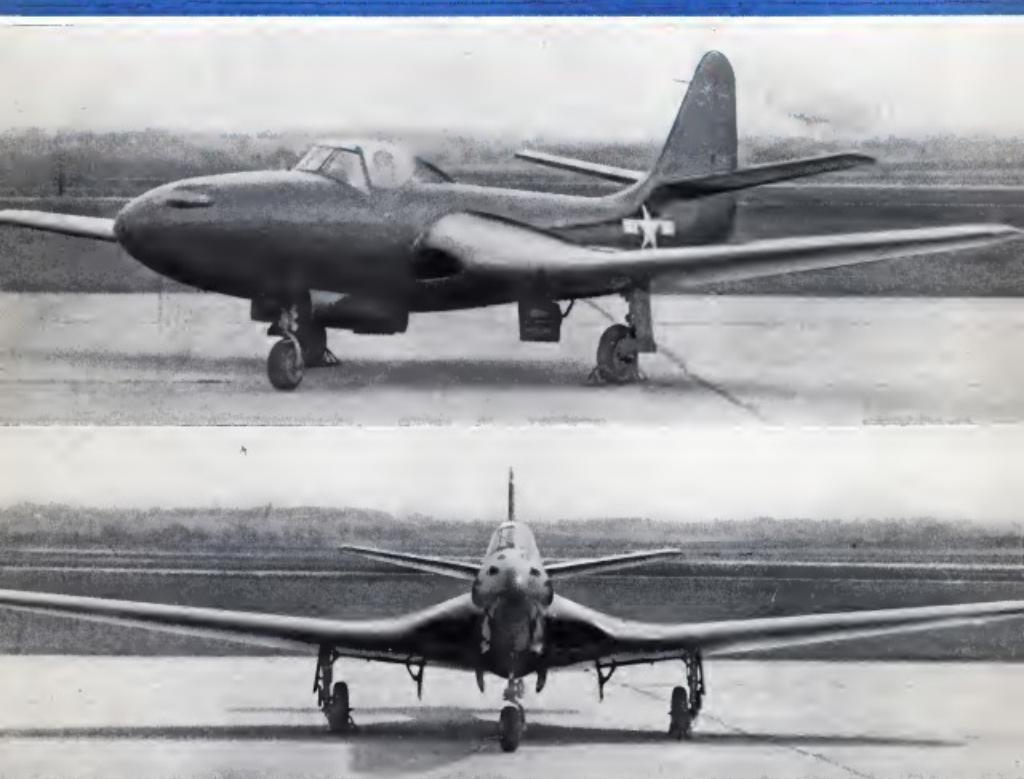


Aviation News

MCGRAW-HILL PUBLISHING COMPANY, INC.

JANUARY 14, 1946



Carrier-borne Jet Plane: This FD-1 Phantom, designed and built by the McDonnell Aircraft Corp. is the first carrier-type aircraft powered exclusively by jet engines. Already extensively flight-tested the Phantom has a service ceiling in excess of seven miles and is the first Navy fighter to attain speeds of 500 mph. Powered by two axial-flow Westinghouse turbo-jets built into the wingroots, the Phantom has a range of over 1,000 miles. (See Headline News)

Miami Air Show Found Lacking On Many Points

Weather cuts lightplane attendance; personal aviation gains little.....Page 7

AIA To Map Joint Overseas Service Organization

Export Committee will present plan for maintenance of surplus craft.....Page 9

New Cessna's Price Likely To Jolt Other Firms

125-mph. lightplane will sell for \$2,495, well under cost of similar craft.....Page 13

New Civil Aviation Parley Opens in Bermuda

U. S., Britain apparently enter conference set on having own ways.....Page 31

THE AVIATION NEWS

Washington Observer



Unnamed, Unknown, Unsung but Still... 1st

After compiling more "firsts" than any of its combat units, the Howard unit bombers, a B-17 Flying Fortress, has been officially grounded, never to again

Stripped of turrets, guns and armor plates, the bomber was converted to a flying laboratory and is to be being transferred to the University of Minnesota's Aeronautical Engineering Department in AT&T after serving more than three and one-half years in Minneapolis in the development of a long list of automatic control devices jointly developed by mechanics of the company and the Air Force.

The Honeywell test ship was the

1. First bomber equipped with an electronic control system 1944
2. First plane equipped with an electronic bombing computer
3. First plane equipped with a steering motor trying in color with flight control
4. First plane equipped with an electronic fire-control system
5. First plane equipped with electronic device master control supercharger control and using lenses for identifying equipment.

From these accomplishments you can readily see how Honeywell creative engineering can and will help you improve performance of all types of aircraft.

The Honeywell program includes a complete flight control department, navigation, and thousands of dollars worth of testing equipment. In addition, technical application engineers, with broad experience in the use of aeronautical and industrial controls, will collaborate with aircraft manufacturers and airlines in developing the most practical equipment for such specific problems. These work involves consulting service and flight testing at the customer's plant. This man can help you in the application of Honeywell equipment to your control problems.

Minneapolis-Honeywell Regulator Co., Aeronautical Division, 2669 Foshay Avenue So., Minneapolis 5, Minnesota. Branches and distributing offices in all principal cities.



HONEYWELL
CREATIVE ENGINEERING

Makers of the famous Beech
Biplane Bomber and the
Army Air Corps Bomber

JET TYPES—Fact that Army and Navy set pursuing different paths in the development of jet engines isn't too surprising. The same thing was done with conventional engines under an agreement that the Navy would concentrate on air-cooled, Army on liquid-cooled. Result was that contrary went from the war with both types highly developed.

SULLIVAN AGREE—Despite talk of Edwin Pease giving the Navy secretaryship when Foote had stepped down (which may cause if agreement is reached on reorganization) there is considerable liquid betting in Washington that the post will go to John E. Sullivan, new Assistant Secretary of the Navy for Air.

INTEGRATION AND UNIFICATION—Some quarters in Washington believe the services will come up with an integration program that will replace the unification proposal of the Army last week. The latter move to come if something isn't worked out. AAP is reviewing some better pals in the War Department and is reported ready to pull out in favor of an organization in which it would get full independence. General outline of the new plan does not depend on Army, Navy and Air, with an added department or joint agency for common procurement, industrial mobilization planning, hospitals, warehousing, etc. Joint flight of rigs would remain. Materiel is being handled gingerly, will leave some units out on a limb.

PROFITS—The Vinton-Truman Act, limiting profits on aircraft and Navy ships and parts thereof, is in effect again with repeal of the excess profit tax. The Act has been repealed by the Revenue Act of 1949, which substituted the new HR-622, introduced by Vint-

son himself to replace the Act, is pending but is not being pushed. No hearings have been scheduled. The Act calls for a limit of from 10 to 12 percent profit on all contracts over \$25,000 for Army and Navy airplanes and Navy ships, and components—including cost-plus fixed-price contract. Contracting agencies have been informed of rescission of the law. Costs in Army contracts are based upon T. D. (Treasury Decision) 3001, a guide for calculating costs under the Vinton-Truman Act. Costs in Navy contracts are based upon the "green" book, "Preludes for the Determination of Costs," which the Navy regards as a streamlined interpretation of T. D. 3001.

STORMS APPROACH—Reconstruction Finance Corp. officials are waiting to see what form the financial between Lt. Gen. Lloyd R. Gregory and the Surplus Property Administration will take when Gregory and the War Assets Corp. take over surplus disposal operations Jan. 15. RFC people have been complaining that SPA has not been concern with racing policies—it is reported to do under the act—but data also has been trying to control rental operations. Gregory's successful mission in Quartermaster General gave an indication that he would welcome SPA "interference" as a job over which he is supposed to be responsible here.

UNFAINTED ENGINES—Symbolic of the engine disposal headache faced by RFC is the fact that although four well-known makers of low-powered engines have negotiated agency agreements, the leading manufacturers of large engines—Consolidated and Pratt & Whitney—are having no part of the situation. Largest number of engines in surplus are the big ones



Side view of the McDonnell P-80 Shooting Star, first jet fighter (see Headline News)

FOR COMBAT—THE BOEING B-29 SUPERFORTRESS

The Boeing Streamliner—incorporating all the aerodynamic advancements proved in the B-29 Superfortress—brings to air travel the same skill and experience in research, design, engineering and manufacture that gave America the B-29, the sleek B-52 Flying Fortress, the nonstop Clippers, the Stratoliners and other great Boeing airplanes.

"Built by Boeing." It's built to last.

BOTH BUILT by BOEING

FOR PEACETIME TRAVEL—THE NEW BOEING STRATOCLIPPER

VOLUME 8 • NUMBER 1

Aviation News
McGraw-Hill Publishing Co., Inc.

JANUARY 14, 1946

Miami Show, Curbed By Weather, Found Lacking on Many Points

Lightplane aeroade from northern states greatly reduced; military pilots and stars fly in; service is meager; design, engineering and manufacture that gave America the B-29, the sleek B-52 Flying Fortress, the nonstop Clippers, the Stratoliners and other great Boeing airplanes.

By J. K. VAN DENBURG, JR.

America's first big post-war airshow—the 11th annual All-American Air Meet—was held at Miami, Fla., over three days, Jan. 4-6, but whether it was a success or a failure would be hard to say.

Show officials said a total of 46,000 attended the meet at the city's International Airport, far east in the subtropical scrublands. Some 2,000, we are told, were military pilots, so we know for sure, because civilian flyers sought for the event were limited to less than 2,000 speeds and engine problems. An announcement at the Coliseum Hotel indicated.

Weaknesses—Bad weather kept many lightplanes grounded along the airways from the north. More than 3,000 had been expected to join in the aeroade sponsored by lightplane producers and the Chair Oil Co., and late arrivals told of hundreds of planes "itting it out" up the line. About 600 private planes were shown, but the International Air Meet with several hundred others in other fields in the area.

The meeting had moderately good weather throughout the three days. There was a ceiling of 3,500 ft. or better with scattered clouds, but a fresh northeast wind blew steadily and somewhat hampered lightplane flying. It gave pilots a difficult

headwind on the way down, but heated along those who started home Monday.

Speciale—The show was a one-day affair, with flying segments, aerobatics and high-speed demonstrations.

But it is doubtful whether it did much to boost personal aviation with the non-flying public.

Weaknes—There was the weather handicap which kept many lightplanes away although airlines were operating on schedules—providing a poor comparison.

The wind and bad weather kept racing planes down and consequently gave spectators little chance to see lightplanes in action.

The show was so arranged that the public entered the field at the hardest possible point—from the lightplane parking area and then walked the three-quarters of a mile to the grandstands in that section of the field.

A mid-air collision during the Formula race plagued one plane to the ground and seriously injured the pilot.

Registration badges, worn by all participating in the show, did not indicate those who flew down in their own planes—and a good chance to demonstrate to Floridians and winter visitors the utility of



Entered Trophy: Jack Enders, who was winning the Florida Trophy race at the Miami Air Meet, at the same time a runway plane resulted in a trophy named, receiver his manager, aircraft from Harry Frazee, Jr.

The lightplane was lost.

Credit—On the favorable side of the balance sheet were demonstrations at aviation's advanced and potential future.

The Navy and Marine Corps put late model fighters, dive bombers and torpedo planes through their paces in both formation and low-level flying.

The Army had a P-51 on hand to leave the crowds breathless with its speed, a Sikorsky R-3 helicopter to show its unique flight characteristics, and a line-up of bombers and fighters, down the Marine to the skydivers, near the entrance.

A Premium scratchbuilt by Ed Morris, Naples (John Howard, owner of the Caribbean Transport, Woody Enders (second), and Sandy Masson (third) showed what small planes could do if the pilot's



Boeing Start at Miami: Five Ercoupe got off in a record-day event at the Miami All-American Air Meet. In the background is the main hangar at Miami's International Airport, where the show was held.

bold while rounding a turn. In the background is the main hangar at Miami's International Airport, where the show was held.

lasting of Lester-Koehlers' slide by Knobell-Berber.

► **Siddeley**—Also on the credit side was an exhibition in a downtown, municipal auditorium where approximately 80 displays had been placed by the Army, Navy, Coast Guard and manufacturers. Despite constant "glaps" by the passengers at the airport it drew comparatively small crowds, however. It was to remain open through Jan. 12.

Edmondson Wins Feature at Miami

Feature race of the Miami All-American Air Massurers was won by Woods Edmondson, flying a Monocoupe. His time at the 30-mile cross-country went for the Glenn H. Curtiss Trophy and \$1,250 first-prize money was 24 min. 41 sec., or an average speed of 138.4 mph.

Second place went to Matt Birney, Lynchburg, Va., and third place to Jack Tamm, Miami. Both of them also flew Monocoupes. ► **Other Races**—Results in the other races were:

► **Lemmons**—12½ mi. Randolph Inn, Jacksonville, Fla. 16 min. 48 sec.; Joe Marr, Miami, second;

Old-Time 'Blood Bath' Missing

The "blood bath" which used to characterize air shows was witnessed by us at least at the Miami All-American Air Massurers although several mishaps did occur the meet.

In the遇rope race on the second day of the show, two planes, flown by M. J. Miller, Rockville, Md., left and was demolished after the second-place plane crashed into its tail as they came out of a turn and crossed the line in front of the spectators. An injured man was seen near the crash site, but the instructor parking area about a half-mile from the straightaway was parked plane. The遇rope which hit him had had its propeller damaged and was taken to the ground by a man in front of the crowd by its pilot, Thomas Miller, Bethesda, Md.

► **Closed Range**—Last day of the meet a biplane crashed into a van-occupant Monocoupe plane just outside a "Door prize" and taxied about 20 ft. into the audience. The two men seated in the safety of their cover were badly injured.

Moody Lamon, Lansing, Mich., third
► **Pipers**—13½ miles; Tom Davis,

several trophies still remaining to be awarded.

Since, otherwise, a Monocoupe, piloted by Herbert Myers, Oklahoma City, crashed on takeoff on the opposite side of the large field, Myers' ankles were fractured but an excellent prognosis was given.

A Monocoupe grossed down on landing due to landing gear failure, and several private planes landed over at various times during the meet when they became bogged down in the soft sand beside the straightaway.

► **Closed Stays**—In addition, Capt. Jim DeCosta, Honduras military attaché in Washington, and Capt. Jorge Mireles, Venezuelan air attaché in Washington, suffered serious injuries when a small plane crashed into them. Their auto Police had killed the lead car of the military convoy carrying a party of Latin American officers in the show and the action left the two men sitting squarely on the track. The two men jumped to safety off their cover and were badly injured.

Winston-Salem, N. C. (flying the 1,000th Club built since V-J Day) 11 min. 20 sec.; John Taft, New Brunswick, N. J., second; C. H. McCormick, Miami, third.

► **Monocoupe**—12½ miles; E. A. Uvila, Jr., New York City, 14 min. 30 sec.; Doug Daboll, Miami, second; R. A. Powell, Miami, third.

► **Monocoupe**—12½ miles; Earl Toliver, 12 min. 38 sec.; Woody Edmondson, Lynchburg, Va., second; Wilbur J. Sterryck, third.

► **Finstone Trophy** (lightplane handicap)—14 miles; Jack Sondges, Winter Haven, Fla., 14 min. 12 sec.; (Taylorsville, Ky.) R. A. Drury, Jr., New York City, second; (Taylorsville, Ky.) Earl Toliver (Monocoupe) third.

► **Worrell's Race**—12½ miles; Vern Herk, Miami, 14 min. 29 sec. (Club); Bob Lamon, Miami Beach, second; Bruce McLeods, Apopka, Fla., third.

► **Frances Cup**—Fourteen events had been scheduled originally, but wind and lack of entries cut the program.

Jack Reno Dies

Jack Reno, 22, Pittsburgh, veteran balloonist died last week. He made more than 3,000 ascensions. He was a member of the Balloonists of America, the Aerowave Club of Maryland, and the Aero Club of Pittsburgh.



Air Show Crash: Last day of the Miami All-American Air Massurers a biplane crashed into that van-occupant Monocoupe plane which had just been awarded as a "Door prize" and tamed it into the handstand. Much school children scattered to safety as the plane's propeller sliced into the trophy table and crushed several of the awards.

Joint Overseas Service Set-Up Will Be Proposed By Industry

AIA Export Committee will present plan for government approval at meeting of handling problem of marketing war-surplus U. S. aircraft sold to foreign customers.

By WILLIAM KROGER

Friends for a jointly-owned overseas services corporation is another U. S.-made bid to foreign customers by the Foreign Liquidation Commission will be presented to Government officials on March 1.

This was the most tangible suggestion of how to meet an increasingly vexation problem, with worldwide implications in export trade, that was discussed last week at a meeting at Miami of the Export Committee of the Aircraft Industries Association. Friends for a solution is the industry itself, the AAIF and the PLG.

► **Stiles Heavy**—PLC to date has sold some \$6,800,000 worth of aircraft and parts to foreign governments. Although it bought many aircraft, it has, to date, not taken parts for its aircraft. No arrangements can be made for recovering and maintaining the aircraft! That is a major factor beyond the presence of PLC. U. S. manufacturers of the equipment could do it only on service contracts which would be periodically payable as a service and maintenance basis alone.

If a servicing arrangement could be worked out PLC would find it easier to sell the surplus material AAIF, which has the job of servo-managing items PLC cannot sell, in the hope to boost sales. The industry wants to avoid any possible reference to U. S. products that might arise from service due to faulty serving and maintenance. That because of police experience in view of the coming battle with Britain for armament export trade.

► **Plan**—That is the essence of the dilemma passed to AIA's Export Committee by AAIF and PLC officials. The outcome of the Miami meeting was that the committee agreed to draw up the industry's outline of how best to meet the problem. As privately considered, it would entail "agency agreements"—such as used by the Aerostar-France Corp. in its disposal of surplus engines and parts—between PLC and individual companies

to the British government, with payment included in the \$4,300-\$800,000 loan to Great Britain. A bulk sale of surplus in India is in the works, and PLC expects to open similar negotiations soon with New Zealand and Australia.

► **Miami Sales Center**—Initiative of the fast-moving modern sales method, PLC has launched to discuss of its venture the overseas sales committee to be opened in Miami, and shown to the industry representatives in a previous Oct. buying a former Air Technical Service Command building containing 38,000 sq. ft. of floor space, the sales center is equipped with charts, graphs and other up-to-the-minute merchandising paraphernalia. Sales catalogs, to be ready about March 1, will be printed in English, Spanish and Portuguese.

While impressed with the eye-catching display of PLC's sales techniques, and aware that it was aimed at having the South American business long sought by Britain, the industry representatives were at the same time disturbed by the manner in which PLC handled its affairs. They wanted to know if PLC's sales force was to be the same that AAIF had, and whether it would be allowed on the rate of mark and profit, when one of the industry's major problems is to get back sales for export market with new aircraft.

► **Palated up**—The PLC display, whether calculated or not, pointed up the Government's contention that it would be to the industry's advantage to see that the planes used aboard and bearing the labels of U. S. manufacturers be maintained in such condition as to be in itself a U. S. productive skill.



Aerostar Wins: Miss Betty Corrigan, United speedboat racer and sister, hands Aerostar the Curtiss Trophy for winning first place in the seaplane competition at the Miami Air Massurers at Woody Edmondson (center) aerial-plane winner and Bassey Warren, third, look on. (For other news of Miss Corrigan's activities, see Private Flying).

New Congress Session Convenes With Ambitious Aviation Plans

Thorough investigations of national and international transportation policies loom as most significant, with comprehensive legislation likely as outcome.

The new session of Congress convenes this week with plans for ambitious undertakings in the aviation field.

Through investigations of national and international transportation policies, contemplated by both House and Senate committees, figures are probably the most significant aviation subjects in the Congressional agenda. The investigations are preparatory for comprehensive legislation.

Intergovernmental.—The House Interstate and Foreign Commerce Committee already has had the groundwork for its investigation, required to highlight the need for integration among the various modes of transport—air, waterway, highway, and railroads. The department bills—the committee's bills are replete with documents from private transportation leadership by train as well as overall transport leadership, the Commerce Committee plans to open consideration of the omnibus domestic aviation bill introduced by Rep. Pat McCarran (D., Nev.) early last year. Chairman Jonah Bailey (D., N. C.) at Senate Commerce already has invited McCarran to set up dates for hearings on the measure, which, among other things, re-establishes an independent Civil Aviation Authority.

Senate.—The division of House Interstate to lump aviation legislation and airways-old transportation bills into one measure, the Senate Commerce will review the omnibus McCarran bill before slight changes. The Senate will take decisive action during the coming year on air transport problems. House Interstate has postponed its previous plan to act separately on domestic aviation issues, such as state participation over interstate carriers,

multiple taxation, or separate CAA. The time-consuming difficulties and wrangling involved in shoving omnibus aviation legislation, let alone separate transportation legislation, through Congress have been demonstrated by the case of the omnibus Lea bill of the 1943-44 session. Both the little chance of anything more than a beginning on over-all legislation.

International.—In the intercontinental field, the "overseas company" provision will continue to figure in the Congressional picture. McCarran's plan in Bill H.R. 301 for a Senate Commerce Committee vote on his so-called "All American Flying Laws" bill early in the session. Committee approval of the measure is a possibility; Senate approved similar legislation in the 1943-44 session, but did not pass it.

While late-stage negotiations are under way, the Senate will transport legislation by train as well as overall transport leadership. The Commerce Committee plans to open consideration of the omnibus domestic aviation bill introduced by Rep. Pat McCarran (D., Nev.) early last year. Chairman Jonah Bailey (D., N. C.) at Senate Commerce already has invited McCarran to set up dates for hearings on the measure, which, among other things, re-establishes an independent Civil Aviation Authority.

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First All-Jet Fighter Announced By Navy

A significant development is the history of naval aviation in the announcement of the FD-1 Phantom, designed and built by the McDonnell Aircraft Corp.—the first Navy fighter plane powered exclusively by jet engines and intended for carrier operation.

This craft, already extensively flight-tested, opens the field of carrier operation to the all-jet interceptor. The FD-1 has a maximum speed of 600 miles per hour, a climb rate of 6,000 feet per minute, and a service ceiling of 46,000 feet. The Navy reports that the plane, primarily designed as an interceptor, has an extremely high rate of climb and a range of approximately 1,000 miles.

Propulsion.—The Phantom is powered by two axial-flow Wright Whirlwind turbojet engines built into the wing roots. Of exclusive American design, the engine combination is unique in that no long trunnions or shafts are used. Two units may be used for conditions where take-off assistance is needed. The plane is a single-seat, low-



Navy Jet Fighter. This Whirlwind-turbo-jet-powered FD-1 Phantom, built for the Navy by McDonnell Aircraft Corp. (Continued on page 11)

C-W Says New Motor Sets Hp.-Weight Mark

The world's lightest air-cooled engine per horsepower is claimed by Curtiss-Wright for its new powerplant with displacement less than 10 cubic inches. The new engine, the C-Cyclone 5 type, is said to have a maximum weight only 1,350 lbs. and delivers 1 hp for each 8 lbs. of dry weight.

G. W. Vaughan, president of Curtiss-Wright and of its engine-building division, Wright Aeronautical, explained that basically the new engine is built on the same lines as earlier models of the C-Cyclone 5 type, but advancement in cooling, supercharger efficiency, and structure have enabled them engineers to take increased output from the 1,030 cu. in. which have been standard displacement of the series for several years.

Engines.—The new engine is installed in the Curtiss SC-100 biplane and in other experimental military aircraft. Vaughan said that certain diameter and bore sizes have been selected for extensive definitive accomplishment of the series will be made later.

Curtiss has been improved by use of a new-type forged aluminum cylinder head with differential financing. Among structural features are added strength gained through use of the forged head, stronger power transmission parts, all jet for increased cylinder and piston cooling lubrication, high durability valves and increased cam overlap for improved detonation.

Supercharger.—An "inexpensive" device, which adds to both pressure and efficiency of the supercharger, is used in the engine to permit it to maintain power at higher altitudes than were attainable with former engines of the series.



THE BRISTOL 170:

Bristol's first post-war aircraft built to civil design, is a prototype of two structurally similar models, the passenger-carrying Freightliner and the goods-carrying Freight. The plane was given its name last night recently at the Bristol plant. It is powered by two Bristol Hercules engines of 1,875 brake h.p. It has a cruising speed of 138 to 160 mph and will carry a 5½-ton payload as a cargo carrier.

Doolittle Will Be Speaker At Annual IAS Banquet

The Institute of Aerospace Sciences has announced that Lt. Gen. James H. Doolittle, past president and fellow of the Institute, will be the principal speaker and guest of honor at its Annual Hamaca Night dinner to be held at the Waldorf-Astoria in New York Jan. 26.

Noorduyn Spies Up

B. C. Noorduyn has part company with W. E. G. Holt. His was the last and largest aircraft and Northwest Aviation Ltd., has been broken up into two companies.

Noorduyn has put Noorduyn all rights and equipment, and will continue to build the Noorduyn Avenger transport, and the United States AAF as the UC-64, for the Canadian and export markets with new financial resources.

New Firm.—Other Noorduyns have formed Noorduyn International Ltd. to make aircraft other than aircraft in aircraft accessories. His chairman has been recruited as he will manage the government-built factory of Mountain Aviation at Dartmouth Airport, Montreal.

Aeronautical Board Ready To Proceed

Reorganization of the Aeronautical Board, established in 1918 for joint Army-Navy planning, procurement, and coordination of all power aircraft needs, Aug. 27, '43, has been completed. The Board will resume functions which during the last few years had in part been delegated to various war agencies, including the War Production Board and The Joint Aircraft Committee.

The new board includes the following members: Army—Deputy Commanding General, Army Air Forces; Assistant Chief of Air Staff, Material and Services; Special Director, War Department General Staff; Secretary, Navy—Deputy Chief of Naval Operations (Air); Assistant Chief Bureau of Aeronautics; Director, Aviation Logistics Plans.

Congressional.—The following legislation has been introduced: Planes and Pilots, Research and Development, Production Programs, Supply and Maintenance Requirements; Aircraft Radio and Electronics; Aircraft Ordnance and Ammunition; Army-Harp-Covil Committee on Aircraft Design Criteria, and the Working Committee.

The latter is charged with the preparation of joint Army-Navy aeronautical standards; the coordination of release for domestic and foreign sale and manufacture of equipment, and the release of industrial information, coordination between committees of the Aeronautical Board and the Office of the Secretary. Membership of that committee consists of a senior Army and Navy aviator appointed respectively by the Commanding General, AAF, and the Deputy Chief of Naval Operations (Air).

Airlines Announce Major Appointments

Gulf becomes TACA traffic supervisor; McElroy named legal director for United; Terrell appointed TWA general traffic manager.

Local airport expansion agreements between airlines and airports include those of three vice-presidents: a local chart, a general traffic manager, and a Washington representative.

Charles L. Gull. has been named vice-president—traffic for TACA Airways System. Before joining TACA Gull was vice-president Transcontinental & Western Airc. Inc., Inc., for 18 years serving as the sole state of Colorado. He is also president of the Colorado Chapter of a new lightplane.

Gull received his flight training from Glenn Martin in 1913 at the age of 15, and by 1915 was taking part in a team circuit. Mexican revolution in 1916 had him as head of staff of the small Mexican Federal Air Force, under Gen. Carrillo.

Following World War I he built a series of custom planes around a famous Hispano Hispano engine, later turning 50 the predecessor of racing planes.

E. Hanmer. who has been assistant director of public relations.

Conrad Lorraine E. Williams has been appointed Washington representative of McDonnell Aircraft Corp. Williams has been head of surface production in the Navy's Bureau of Aeronautics.

Gordon D. Brown has been elected a vice-president of Borden Trust Co. Brown, who has been actively involved in the aviation industry for over 20 years, will head up the bank's services to that industry with a policy to keep the best interests of the individual industry.

The latter is charged with the preparation of joint Army-Navy aeronautical standards; the coordination of release for domestic and foreign sale and manufacture of equipment, and the release of industrial information, coordination between committees of the Aeronautical Board and the Office of the Secretary.

Brown served as assistant to Donald Douglas, as director of market research and development in product engineering and sales. G. F. McElroy has been appointed director of legal affairs for United Air Lines in charge of a newly created Legal Department. He was assistant to the president since 1945. Peter Terrell has been appointed to the McElroy Law firm, Chicago, for some time he has been devoting his time to Coast management-exploitation relations.

Lawrence W. Brown Dies, Pioneer Flyer and Designer

Lawrence W. Brown, pioneer pilot and aircraft designer died after a heart attack at his home in Los Angeles, Calif., Aug. 25. He was the creator of a series of famous racing planes, the holder of FAI pilot license No. 350, and an Early Bird. He had recently organized Brown Aircraft Co. at Montebello, Calif., for the production of a new lightplane.

Brown received his flight training from Glenn Martin in 1913 at the age of 15, and by 1915 was taking part in a team circuit. Mexican revolution in 1916 had him as head of staff of the small Mexican Federal Air Force, under Gen. Carrillo.

Following World War I he built a series of custom planes around a famous Hispano Hispano engine, later turning 50 the predecessor of racing planes.

AVIATION CALENDAR

Sept. 10—Illustrated (Old) Aeroflot Show, 10th-12th—International Aviation Meeting, 10th-12th—American Legion National Convention, New York.

Sept. 11—Meeting of American Astronomical Society, Princeton, N.J.—National Research Foundation, Columbia University.

Sept. 12—IAEA Economic Data Conference, Paris.

Sept. 13-15—Air Defense Conference, sponsored by the Armed Forces Staff College, Fort Monroe, Va.

Sept. 15—Gulfstream Transport Association East Coast and Mid-Atlantic Conference, Park Plaza Hotel, New York.

Sept. 16-17—American Alumni in Argentina, Buenos Aires, holding annual meet.

Sept. 17-18—Aero India Conference, Bangalore, India.

Sept. 18-20—American Aviation Association, Washington, D.C., holding annual meet.

PRIVATE FLYING

Price of New Cessna Model 120 Likely To Jolt Other Producers

125 mph. \$2,495 lightplane will sell for well under cost of an other craft in its performance class and within \$300 of lowest price yet quoted for two-place ships.

By ALEXANDER MUSUREY

The \$2,495 price tag on the Cessna Model 120, a newly-announced Model 120, is quite likely to have a jolting effect on the prices already announced by other personal plane manufacturers for their own plane models.

The Model 120—a two-place 125-130 mph. high-wing monoplane, all-metal except wing-covering—has a guaranteed top speed of more than 130 mph. Yet the \$2,495 price is well below the \$3,000 per hour demanded by a competing plane, and is within about \$300 of the lowest price yet quoted for two-place planes.

Kirkland, Wash.—Cessna expects the Model 120, and its "slacker" counterpart, the Model 125, which sells for \$3,095, will be rolling off various production lines in Wichita, Kan., by March, and that two other models, the 170 and 180, will be ready by this summer. While it will be several months before the Cessna will be in the field in any great numbers, it is expected that competition makes planes in this price class with the Model 120 will have to change tactics advertising price or losing business to the producer.

Most revolutionary feature of the 130 and 140 is the Cessna-patented spring landing gear, made of heat-treated chrome vanadium, which absorbs the shock of landing by

Similarities

Photos of the new two-place Cessna Model 120 or deluxe Model 125 reveal a remarkable resemblance to the famous Model 180, which will give the lightplane split seats and roominess. Distinctive characteristics are the more slender landing gear on the Cessna, its longer fuselage and shorter wingspan, and a window behind the door and, of course, the "E" for Efficiency, on the nose of the

been the subject of experiment by various military and civilian engineers for a number of years that is one of the first, if not the first, indication of its use in quantity production.

Specifications.—The basic Model 120 is a 4-seat, 4-in. wingspan, and an overall length of 28 ft. It is powered with an 85-hp. Continental engine, and carries 25 gallons of fuel in two wing tanks, with a natural, gravity flow of fuel to the engine, eliminating a fuel pump. The plane has a range of four hours which, with a cruising speed "well over" 125 mph, would make its range somewhere over 400 miles.

For the same \$265, the buyer of the Model 120 gets a more luxurious cockpit upholstered colors with adjustable seats and sound insulation, directly linked and shock mounted instrument panel, manually controlled flap, ground taxying degree of flap setting desired, starter and generator, provision for two-way radio, provision for landing lights, steerable tailwheel. Both planes are equipped with hydraulic brakes, and fixed-pitch wood propellers. The Model 120 has full-servicing but non-steerable tailwheel, and has no flap, or starboard.

Production.—From the tone of the first announcement, Cessna is starting



New Cessna. First photo of the new Cessna Model 120 shows the new spring-loaded landing gear. Despite its fragile appearance, the company reports it has withstood 20-ft. drop tests.



the Model 130 toward the operator market as a trainer and general cross-country rental plane, while the Model 140 is aimed at the individual general flyer.

Both the 130 and the 140 have received experimental type certificates from CAA. Designers are expected to put their first models in flight.

Cessna points to its previous record in plane production in launching its new models. The company was the government's triple supplier for "The World's Most Efficient Airplane" three times. During the war it manufactured military trainers and utility planes in its company-owned plants on a contract basis carried out by the usual cost-plus arrangement. As a result of its production volume and efficiency it was one of the few manufacturers to receive the Army-Navy "E" award five times.

Fat Rocket Flight

Ground speed of 282.4 mph. for the 300 miles from Seven Hills, Ga., to Roswell Field, N. M., was reported for a flight made last week by the Johnson Rocket 140. The Fl. Worth-built plane, powered by a Pratt & Whitney R-1830-45, had a maximum seat weight of 100 pounds, made the trip in 2 hrs. 20 mins. Johnson officials reported the speed was approximately 40 mph faster than the advertised cruise speed of the Rocket 140, indicating the importance of a strong tailwind.

Briefing For Private Flying

A new hydraulic variable-pitch propeller for lightplanes is expected to go into production soon at Continental Motors Corp., Muskegon, Mich. The new prop, described by Continental President C. J. Rose as "particularly safe and efficient in operation and with many advantages over competitive propellers," will mark the company's entrance into this new field and immediately will provide serious competition for other propeller manufacturers. Continental now has a dominant place in manufacture of most of the engines in the fast post-war lightplanes, and is likely to take a serious try for a like position in the lightplane propeller field.

ARMONCA EXPANSION—The Armonca Aircraft Corp., based at Elizabethtown, Ohio, plans to increase production of the Middleweight, 60-hp plane from 18 to 35 planes a day. Besides additional facilities for painting, welding, jig and tool making, material handling, experiment and testing, and additional machined components, the new program calls for adding a large personnel office and cafeteria for the employees.

THE BEST LAID PLANS—West Coast aviation folk are chafing at short a story told so Lockheed, noted for its preparations to achieve superexterity on any new airplane which it is not yet ready to sell. The yarn concerns the first test flight of the sensational Little Dupper, one-plane plane, early next week. The flight was scheduled at Naval Air Station, La., a frowning area. Lockheed officials were confident that the local inhabitants, who eyed the cigar-like with only casual interest, had little appreciation for what they were seeing. But then somebody noticed two of the "smokers" wearing overalls which were obviously new. They straddled curiously away, after a thorough inspection, and left the airport in an uproar as the story goes, which took the mystique of the Douglas Airplane Co., a principal Lockheed competitor.

CAP TRANSCONTINENTAL ROUTES—Colorado CAP flyers are preparing to map all known "hot spots" areas over the Rocky Mountains where updrift and downdrifts make flying hazardous for any lightplane. National CAP headquarters, using the Colorado plan, is suggesting to other states' Mags at all states, showing areas of forest, swamps, or boulders where there are no natural landing fields, would make it possible for private flyers to fly west under transcontinental routes. Alternatives and emergency landing fields could be concentrated along these routes.

YALORNA CHAFFS TO FRANCE—Two Terraflex Transports may be the first post-war American lightplanes to be exported to France, if a sensible purchase's plans are carried out. A French wartime pilot, the manufacturer reports impressed by the plane's performance, has asked government permission to ship two of them to France for use in air shows there.

GILDER PARK PLANNED—Portions of 1,400 ac. Table Mountain, near Golden, ten miles from Denver, is being argued on city officials with the proposal that the area be used as a municipal glider center. Denver gliding enthusiasts are quailing. Lt. J. J. Mason, Army gliding specialist, is saying that Table Mountain offers unusual advantages for gliding found in few other locations in the country.

GLOBE SUB-CONTRACTS—Globe Aircraft Corp., Ft. Worth, has announced a contract for subcontract production of more than \$6,000,000 worth of two-place, all-metal, low-wing aircraft for the U.S. Army. Avco Manufacturing Co., Los Angeles, the Dallas concern already has a contract to build P-51s under a similar arrangement with Fazloli Aircraft Corp. John Kennedy, Globe president and his company already had more than \$10,000,000 worth of orders for Swifts, and that the additional production capacity offered by the Dallas organization was needed in order to meet demands of his dealers and distributors.

LUSCIOLE PRODUCTION—Luispol, B. E. Kline, president of the Lusciol Co. and visitor at the Miami All American Air Museum, revealed that production of "Silvers" at the firm's new plant in Texas was scheduled to reach a rate of four planes a day last week.

—Alexander McMurtry



ADMIA OFFICERS:

New president of the Aviation Distributors' and Manufacturers Association, W. F. Scott, Jr., of Supply Division, Inc., Atlanta, Georgia, left, receives pin from the retiring president, Tom G. Duggan, of Thompson Products, Inc., Cleveland. Duggan, former chairman of the advisory board.

Huge Miami Land-Water Base Under Construction on Island

Benny Cancini, noted speedboat racer and pilot, heads company developing \$1,110,000 airport which also will provide yachting facilities hangars for 500 planes planned eventually.

Cavisters Airport, a \$1,110,000 field for private land and seaplanes at Miami, Fla., is now reported under construction. It will be operated by the Four Winds Air Association, Inc., headed by M. B. (Bett) Cary. Cavisters, Miami-American, speedboat and plane pilot, the association plans to make the first of a chain of private-type airports throughout the country.

Located on Lummus Island, south of Miami Beach, the new field is designed to provide facilities for private planes, as well as for small business and pleasure aircraft. Features—Planes planned include a 1,000-ft runway for landplanes; amphibian range for seaplanes; hangars at the south end of the base for 50 to 100 seaplane boats and yachts; control tower with full radio facilities; a complete restaurant, lounge room and cocktail bar; an aviation school for land and amphibians; 500 maintenance and repair spaces; banquet facilities for 500 planes with additional tie-down facilities; indoor rooms for plane parts and accessories; a steel parking garage which will cover anything within a 1,000 mile range; charter plane service; and offices for the CAA.

Speedboat service between the new airfield and Miami and Miami Beach will be operated at approximately intervals.

Progress—Plans drawn by General Airport Co., New York, call for development of the project in several stages, as private funds expand. First stage will be construction of the 2,800-ft EAA-WW runway with hangars and a paved surface; one hangar accommodating 20 small lightplanes, and six medium jet planes; a 100-ft square shop hangar; administration building; docking facilities for nine seaplanes, with individual hangars for six small amphibians and two medium jet planes; an amphibian ramp providing access to the seaplane hangars.

A one-way traffic system for taking planes to and from hangars permits a closer grouping of the hangars which would be practical with heavy traffic necessitating planes passing each other in the

area. Body-lane lanes are provided between the eight-unit hangars for smaller planes, and 75-ft lanes between the six-unit hangars for medium-sized planes, while lead-in lanes are 75 ft. wide or wider.

Second Stage—As soon as sufficient patronage at the airport requires, another shop hangar and additional unit hangars for larger planes will be added.

Hangars are designed with special overhead doors which provide unique bracing against high winds with transfer of wind thrust to the ground and through from the door. The door is designed to be opened or closed easily by one person under normal conditions.

Rules—A safety building will be located so that every visitor to the island will have an unobstructed view of the shore windows while the rest of the building has clear approaches to the sunset, so that nonresidents can hangar demonstration planes at the rear of these sunroom units.

Paving will be done by truck delivery during early stages of the field development.

Offices—Officers of the Four Winds Air Association, besides Mrs. Cancini, are Irwin Rothman, New York, vice-president; Lt. Colonel F. W. Mayes, USNR, ad-

New Planes at Miami

Private firms who started the Miami All American Air Museum are only a few of the post-war light plane builders which also set down participation in the Gull air-circus, presented many "show planes." Present are the Piper Superchief, the latest Ermine, the Glau Swift, the new Culver and the Johnson Fischer.

Hard to Find—In some places attended the show that the planes were hard to find. However, a number which received some display time were exhibited as without speed com-

sistant vice-president, and N. J. Barrett, treasurer and secretary, both of Miami.

Matt Criswell holds a commercial pilot license in addition to her experience as world record speed boat owner, at which she has won 56 cups in 10 countries in this country and in Europe.

Future—In estimating the growth of business at the new airfield, General Airport Co. predicts that in the first year the journal is a progressive nation may only to the extent that he can be influenced to take flying lessons, buy an airplane or take charter or freighting air trips to nearby points. The tourist who feels his own plane to Miami for a vacation will be one of a small group for at least the next two or three years, it is predicted.



Cavisters Airport Drawing of the proposed new \$1,110,000 Cavisters Field for private planes at Lummus Island at the south end of Miami Beach, Fla., about the 2,800-ft strip, two hangars for 500 lightplane, replacement range, administration building and shop hangars.

Speedway Aerodrome Mapped

Plans for a "fly to the Speedway" may soon be put into effect in conjunction with the annual Memorial Indiana State Speedway 200-mile auto race now set to begin development at Indianapolis. Possibility of installing an air strip on the field of the 1/4 mile track and tracks were recently noted.

C. A. W. Pfeiffer, president of Marmon-Herrington Co., manufacturer of chassis and frame Diesels, Indianapolis News aviation editor, is secretary of a committee in charge of arrangements. Tentative plan will call for expert drivers from both ends of the Gulf Coast. It will be handled by Horace Turner and Bob Stark, to make arrangements for handling the incoming private plane traffic. Incoming flyers would

be given a dinner on the eve of Memorial Day, which they could be made members in "A Place to the Speedway" club. The club would erect offices and hold annual meetings in Indianapolis at intervals.

Scramble—According to William Glavin, president and general manager of the firm, who was master of the Marmon Air Association, Air Marmoners, the tour might be planned sometime along the pattern of the winter "Scramble" tour to Florida sponsored by the Indianapolis manufacturers and the Gulf Oil Corp.

He said Mr. and Mrs. Nathan, Jr., owners of the speedway, were studying possible airport sites near the track.

CAA Drops BT-13's, Will Use SNJ-3's

CAA inspectors will be provided with surplus Navy SNJ-2 planes, instead of the surplus Army BT-13 planes originally intended, Administrator T. P. Wright announced last week.

Wright and the change was made after examination of surplus BT-13's disclosed that 260 man hours of work would be needed to make these planes airworthy under CAA standards. Because of the cost of this modification, the SNJ-2, the Navy version of the North American Texan or Harvard, also supplied to the Army under the designation AT-6, has been chosen instead.

Note—The change will provide the inspectors with a much quicker airplane, answering critics who had always charged that high ratio of level of the BT-13 when at its performance peak [see *in flight* for the SNJ-3 has a constant speed hydraulic propeller].

Comparison of the two aircraft indicates that the CAA has gotten in other respects by the substitution. Both planes have approximately the same range, around 750 miles, but the SNJ-2 cruises at 180 mph, as against 170 for the BT-13, and has a 21,000-ft ceiling, as against 11,000 for the BT-13. Both planes have flaps, but the SNJ-3 has hydraulically-retractable landing gear while the basic trainer's undercarriage is fixed.

Progressive—The change in planes is regarded as another progressive step for private flying, indirectly, since the administration need not

wait under the new post-war manufacturing standards prescribed in Part 20 of Civil Air Regulations. The plane is licensed back in the general category for cross-country flight, and in the utility category for flight training.

The Voyager 150 is a high-wing monoplane of fabric and steel tubing construction, cruising at 128 mph, powered with a 130 hp Continental engine. It is regarded as one of the best examples to date of what can be done to quiet the usual personal plane by engine muffling and other insulation.

Aviation Insurance 'Scramble' Forecast

A "scramble" on the part of insurance underwriters to get aviation insurance business is likely to have rates down well below what they should be on the basis of present accident rates. Albert J. Berlin, vice-president and financial manager of U. S. Aviation Underwriters Inc., New York, believes.

Writing in a recent issue of *The Eastern Underwriter*, Berlin estimates recent over-hypnotized aviation advertising "which would leave an unsuspecting fellow with a feeling that after 10 easy lessons he can fly to safety by his own courage at least the risks in flight on wheels."

Forecast—If the jolted public takes this type of advertising seriously, Berlin predicts, "it is all folks won't roar to be around very long to maximize its purchase and never purchase again."

"It serves no one to say competition will force rates down below what they should be for some time to come," Berlin cautions.

Salem, Ore., Sky Haven Plans Cabin-Hanger Units

Combination tourist cabin and individual hanger units will be constructed at Sky Haven, a new airport for private flyers seven miles north of Salem, Ore. The 50-acre field already has one turf runway in use and three others are planned. Operators are Richard E. Poer, former Army flier Joe Dewart, Salem; and Max G. Marion, Portland. Ten of the cabin-hanger units are planned for the first stage of development with others to come later. Plans also call for a two-story wooden structure containing restaurant, office and showroom.

Certificates—The Voyager 150 has been assigned CAA type certificate No. 767, which the manufacturer says is the first type certificate issued

Big airline orders for the **MARTIN 202!**



What's the big news in aviation today? The

Martin 202! Right now, large initial orders for the 202, totaling millions of dollars, are on Martin's books. And this is only a beginning! More and more airlines are signing up. Record-smashing domestic and foreign sales are in the making. And in 1947 Martin will be turning out the 202 at a rate of 50 a month! Martin sets the pace for postwar air travel! It's the plane that most nearly meets ATA specifications for a twin-engined, medium-range transport. It obsoletes any plane of its class now flying. And it's backed by Martin's 37 years of advanced aircraft design! No wonder the airlines are piling up orders for the new Martin 202!

Here's Performance Plus!

Years ahead of the field, the Martin 202 flies 100 mph faster than today's transports... offers comfort unsurpassed by even the largest 4-engined craft... cuts operating costs to the marrow. This plane is not just designed for the airlines. It's designed by the airlines... constructed by Martin... to the most exacting standards of the air traveler.

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FINANCIAL

Selective Aircraft Shares Showed Substantial Gains During 1945

Analysis shows number more than doubled in price although pattern was spotty and there were wide variations in gains; United Aircraft Products Corp. lead.

Selective aircraft shares showed substantial gains during 1945. An exclusive AVIATION NEWS analysis indicates that a number more than doubled in price.

As indicated in the accompanying table, the pattern was very selective, and there were wide variations in the gains.

The leaders belong to the common stock of United Aircraft Products Corp., traded on the New York Stock Exchange, which appreciated about 130 percent. This accessory company has relatively limited market interest. The gains are tangible, nevertheless, and illustrate the profit possibilities in special situations. This company has demonstrated a strong upward momentum. Considerable capital leverage also is present in the form of senior debt and preferred stock. The preferred stock has now been retaxed, and the great number of common shares (216,000,000), makes for this market's thus accelerating upward move.

Holdings—Lockheed and Republic

showed the best gains among the frame builders with a gain of around 110 percent. In both instances, there were no never issues ahead of the common stocks thus eliminating any leverage possibilities. The shares ended the year with about 10 million around 1,000. Both companies have been among the favorites for post-war business in the aircraft industry.

Low-priced Paper Aircraft declined in value, ranging from 4 to 1/4 during the year. As a rule, during speculative market periods, low-priced securities attract considerable attention. This probably was a factor in this case. Around 400,000 shares of common stock are presently outstanding.

Gates—Bell, Boeing, Convair, Grumman and Martin showed price gains ranging from 61 1/2 to 10 percent, and, although they have been considered by many market analysts to have encouraging prospects to gather a substantial share of the available post-war business, Bell has witnessed added attention due

to the interesting possibilities of its helicopter.

Douglas recorded a gain of only 38 percent for the year. This may indicate, however, that the company's shares were less inflated throughout recent years than most aircraft equities. As a higher price equity there has also been the inclination of market speculators to avoid that issue as preference to others which have higher percentage appreciation possibilities. The table clearly shows that the lower-priced issues, where reasonably situated have done as well as the higher priced shares.

North American—Among the major frame companies, North American has fared about the worst. This is probably due to the fact that its post-war position is not promising and it is one of the largest labor organizations in the industry—around 3,400,000 shares.

United Aircraft, while considered about the most conservative of all aircraft companies, showed about the lowest price appreciation of all the major companies. This completely integrated unit was long the favorite of the investment trusts when aircraft shares were popular. It has enjoyed far greater price stability than most aviation companies, notwithstanding little news to year.

Its huge capacity for aircraft, aircraft equipment, aircraft maintenance, about 3,400,000 shares of common stock outstanding, preceded by about 250,000 shares of preferred.

Curtiss-Wright—Despite its heavy load of T-387,000 shares of common and 1,138,000 shares of "A" stock Curtiss-Wright has done much better than United Aircraft. The manager showed an appreciation of 27 percent for the year. Again, this is a reflection of the interest in low-priced equities.

Even such companies as Bellanca and Brewster, which have had very difficult times at the height of the aircraft boom, have participated in a small way through the market load of 1945.

Conservatives—Such conservatively managed companies as Republic, Savery and Thompson Products showed very nominal market appreciation.

Prospects—The company lack of understanding in the 1945 price pattern, which may well be repeated this year. New price levels have been established for the individual aircraft companies. These relative positions, good and bad, will be determined by their ability—or lack of it—to show earning power and hope for the future.

1945 MARKET CHANGES AIRCRAFT COMMON STOCK

Company	1945 Market Range		1945 Close	Net Change	Percent Increase
	High	Low			
Bell	112 1/2	95	225	216	100%
Bellanca	200	125	215	205	60%
Brewster	45	35	45	35	22%
Bristol	10	9	10	9	10%
Borg	220	180	215	180	15%
Brewster	6	5	5	5	0%
Cessna	7 1/2	5 1/2	7 1/2	5 1/2	0%
Convair	200	150	200	150	33%
Douglas	100	65	95	75	27%
Grumman	100	80	95	80	15%
Lockheed	100	100	200	200	100%
Republic	40	35	40	35	14%
Savery	40	35	40	35	14%
Thompson Products	15	10	15	10	50%
North American	15	10	15	10	50%
Piper	10	5	10	5	100%
Republic	10	7	10	7	100%
Savery	10	7	10	7	100%
Thompson Products	10	7	10	7	100%
Convair	10	7	10	7	100%
United Aircraft	250	95	250	125	100%
Waco Aircraft	8	5	7 1/2	5	65%

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PRODUCTION

Solar Develops Muffler Unit To Meet Lightplane Complaints

"Triple Unit" manifold, muffler and baffle, made of stainless steel, designed to take advantage of pressure against noise; prefabricated ridge noise race body also scheduled.

BY SCHOLER BANGS

Solar Aircraft Co. of San Diego, now cash in heavily on a nationally-known array of products against uncontrolled aircraft noise.

The company has developed for production what it calls the "Solar Triple Unit," a single-unit combination of manifold, muffler and baffle for small personal aircraft.

H. A. Koenig—In a diversification contract, the company also is ready to begin production of 90-110 Budget auto body kits for national distribution.

Edmund T. Price, director for the "Triple Unit" a combined weight of less than 10 lbs., for two seats, required for a four-cylinder engine interchangeable, of right and left manifolds, an appreciable reduction in engine noise level; and single baffle for both the lightplane cabin and engine carburetor.

Standardized—A feature of the unit will be its manufacture from standard steel to extend the manifold life well beyond that of the conventional heat-treated manifold.

Solar's broadening net with the manufacturer of a single manifolds body kit reflects both the company's current in diversified manufacturing and readiness to adapt employee ideas.

Two years ago Elmer Ross, member of the Solar research staff and a veteran aviator and owner of model racing cars, cited a potentially large market for auto seat baffle, to be sold to drivers wishing to spend their extra energy on power plant development rather than climbing time with the aviation racing car. This was the first proposal. The proposal was accepted as a No. 1 priority project, now in liaison with design teams approaching a nation-wide beta stage.

Baffles—The rear kit will consist of 15 die-shaped stainless steel units plus standard steel wheels fabricated by Solar; the assembled rear being engineered for output strength as well as easy replacement of much-damaged parts. Marketing of the kit will be undertaken by Air Associates.

Price told Aviation News that

Solar, operating plants at San Diego and Des Moines, has reached the barrel bottom of aviation design and now, with an employment of one thousand, is working plans well begun, given license to start developing new commercial and military products.

Joe Black—Still restricted is detailed information concerning the company's jet engine parts manufacture and jet engine research. It is reasonable to assume that eventually may be released to enter complete jet engine production.

Among the company's orders for stainless steel assemblies is one for a light-weight aircraft for tourists.

Price said his company has no intention of attempting to enter the kitchen appliance market, although it does aircraft components.

H. E. Guerin Resigns

As Douglas Plant Head

H. E. Guerin, whom "Guerin products" is credited by Douglas Aircraft Co. with having been the most important single item in war aircraft noise production, has retired as the company's Santa Monica plant manager after 28 years with Douglas. He is replaced by G. A. Hargan, formerly manager of the Douglas Large Aircraft Facility.

Guerin's resignation cut in half the number of men still needed for the processing of aluminum shapes. For the female he substituted heavy cellular blankets which covered the female shape under pressure exerted when the aluminum sheet was stamped.

Guerin's process became the property of Douglas, and through licensing agreements under which Guerin is said to have received a share in royalties, was adopted generally by the aircraft industry.



Solar broadening its horizons in Solar Aircraft's post-war production is typified by widget auto noise baffle (left) and anti-noise unit (right) for personal planes.

AVIATION NEWS • January 14, 1946

Chute Plants Plan Non-Aviation Items

Three Reading Pa. manufacturers so soon diversify into field and urban municipal facilities.

Three Reading Pa. manufacturers, which manufactured 484,000 parachutes for military use, are now turning to civilian traffic production for the immediate future, although none of the war-born plants appears to return to manufacture of aviation products.

The manufacturers and their war production figures, provided this week: Aviaeronautical Supplies, Inc., 460,000 chutes; Reading Air Chutes, Inc., 356,000 chutes; and Varietyrite Mills Inc., 41,368 chutes.

Reading Air Chutes is credited with making important contributions in parachute development by the war department, including a canopy which would slow the fall of a 1,000 lb. bomb dropped from only 100 ft. altitude. This chute was to be developed, and produced, at a rate of 100,000 per month. John H. Guerin, president of Aviaeronautical Supplies, expects his company, which produces belts, dials, serial delivery and clandestine parachutes, principally of rayon, to return to aviation product manufacture in two or three years, after post-war engagement becomes more standardized. He contemplates among other products, a combination life preserver-parachute for passengers as a seagoing auxiliary. But currently his firm is going into manufacture of fiber glass products, including shopping bags which can carry four frame loads for housewives, laundry bags from manufacturers, and other glass products.

Varietyrite returned to its pre-war production of rayon and women's silk clothing several months ago. The company turned out 30,000 rayon hosiery garments, as well as rayon cargo and serial delivery chutes.

John Updegraff—B. F. Fry, president of Reading Air Chutes, has announced his company has started production of rayon tape and lanterns, and by Jan. 31 expects to have 200 employees. Post-war employment was 888.

A statement by Fry, describing his company's wartime work, pointed out that his company performed in design, production, maintenance, storage, handling, repaired chutes for landing wings and equipment, in four dimensions, from .25 to 60 ft.

"The .25 and 45 ft. diameter

chutes," Fry said, "were made of 2% or 3% heat-treated nylon, as strong or stronger than the 8 oz. rayon material used in the 28 and 35 ft. extremes. The gories were segmented and attached on the line. A parabute of this kind requires a great deal of special handling and included a vented gate which relieved the opening impact against the canopy. The function of the boom chute is to apply a brake to the bomb. The function of the boom low-level, holding the hook on the ground, and still allowing the plane to escape."

The manufacturers' diversification leaves no room for complacency, and such were frequently chartered to carry very heavy loads in constant rate of descent. The 45-ft. chutes were used in dozens of these to drop fully equipped boats to marine survivors who were shot down over the sea.

Aerial delivery paratroopers were produced continuously from June 1940 until the close of the war. The serial delivery parachute was the serial-type construction containing 24 gories, each cut from one section of cloth, and approximately 35 D. in diameter. They were equipped with harness and risers adapted to the standard serial delivery pack, but were also adapted to landing at target points in which they staggered in order to land green, yellow, and white. The purpose of the color was to identify specific loads in field operations. This type of chute was rated to carry a load of 300 lbs. for release at an altitude of 1000 mph. It was also adapted to clustering to various greater loads.



SURPLUS NO. 1,000.

Reconstruction Finance Corp.'s Los Angeles agency made its 2,000th mortgage loan sale when the C-47 was bought by Allis-Chalmers Co. for conversion into a flying laboratory. Standing before the plane are J. C. Garrett, Allis-Chalmers president; James W. Corrige, general supervisor of AFC's Cal-Air Field Service depot at Ontario, Calif.; George M. Adkins, AFC chief of surplus aircraft sales of Los Angeles; Stephen Bratt, AFC assistant supervisor, and Eddie Bellante, Allis-Chalmers chief test pilot.

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PRODUCTION — 21

Square D Develops Airspeed Indicator

Development of a new airspeed indicator has been reported by the Square D Company, whose vice-president, Victor R. Cartwright, says that measurement development leading to flight speeds even greater than those already attained by experimental military aircraft will contribute to quantity production of the new instrument.

Known as the Aerov-type, F-4, the indicator will provide pilots with warning in their planes approach critical speeds that are a threat to control and structural limitation.

Compressibility Problems — "Aircraft designers regard these instruments as a partial solution to the problems of compressibility phenomena, a point near the speed of sound when air surrounding a plane starts behaving normally," Cartwright said. "In addition, a pilot is apt to encounter these freakish shock waves, the F-4, besides its safety advantage will permit extensive study of our fastest planes at today's maximum speed limits."

Originally measured by the Am-

erican Service Command and the Bell Aircraft Corp., the idea was transferred into actuality by engineers of the Kollsman Instrument Laboratories of the Square D Company.

The F-4 airspeed indicator has two heads, a red one which indicates the maximum allowable speed and a white pointer which shows the plane's indicated airspeed. Thus the pilot needs only a glance to see that the speed registered by the white head never exceeds that indicated by the red.

SAE Discusses Use Of Exhaust Gases

Discussions before the annual meeting of the Society of Automotive Engineers on ways and means of making more effective use of aircraft powerplant exhaust gases developed that many engineering problems remain to be solved before these waste products are fully used, with developments awaiting progress in metallurgy which will provide metals highly resistant to 3,000 deg Fahrenheit.

John J. Denney, of Consolidated Valley, told the Aircraft Section that

waste exhaust gases can be used in a built-in system to de-ice aerodynamic surfaces. He said that with such a system properly designed and installed, commercial flights could be scheduled with safety during severe icing conditions, extending flying hours and reducing overall costs.

He proposed that exhaust heat be forced by jet pump through ducts within the structure to leading edge surfaces likely to become iced, and added that even the propeller hub similarly could be given air post-turbine.

Ralph L. Blane and Harry A. Greenway, Jr., of Ryan Aerocarrier, told the session that improved materials must be available before substantial progress can be made as regards exhaust gases, holding that stainless steel and iron were inadequate.

They mentioned a new material designated as IR-RDL which was said to hold some promise, but added that its limitations are evident even before it has a chance to prove itself. Such materials, they said, must withstand temperatures of 3,000 deg Fahrenheit and above, when metal they must have a heat resistance better than double that of any material now available.



NEW APPROACH ANGLE INDICATOR:

Model planes show how the approach angle indicator developed by Westinghouse keeps pilots on the correct landing beam. The center plane is following the correct beam since the runway and a pilot following that path would see only green light is the indicator. The pilot of a plane on the top beam would see only amber light, knowing that he was too high, and the

pilot of a plane in the lower beam would see only red light warning him that he was too low. A single 100-watt lamp furnishes all the light for the indicator which can guide airplanes in the greater part of the airport runway from four or five miles away. This view shows the rear of the indicator with its light sources and reflectors.



The Sign of Happy Flying

When you land at your home airport or at a strange field on cross-country, look for the Esso Sign. It's the sign of Happy Flying—your assurance of courteous and dependable dealer service, of quality petroleum products especially engineered for flying.

There are over 500 Esso Aviation Dealers between Maine and Texas who stand ready to serve you with quality gasoline, rust preventives, and engine, hydraulic and instrument oils. The products they handle are backed by more than 40 years of continuous aviation experience and the most complete

research organization in the petroleum industry. Because of the know-how and experience that stand behind them you can be sure Esso Aviation products are quality products.



NOW AVAILABLE... Three brand-new Esso Aviation products! Clean, unleaded 82 octane improved grades 90 and 100 with reduced lead content and higher performance numbers.

INCENTIVES FURNISH THE DRIVE

THE COMING YEAR, 1946, and the years to follow can bring unprecedented prosperity to the people of the United States if the incentives to secure it are provided.

We have the advantage of starting with an economy which has demonstrated a capacity for expansion unequalled in any other country in the world. Our economy has demonstrated, also, one grave weakness—a recurring interruption of the upward trend of production and living standards by wasteful and paralyzing periods of recession. Recovery from each depression always has carried us to new heights of economic welfare, but the toll of the years of flight has been harmful to everyone.

The job ahead of us is a dual one. We must maintain the vitality of an economy which, over the years, has yielded an enormous increase in the American standard of living, and we also must improve its stability.

The Dynamics of American Production

In the last prewar year, 1940, the population of the United States was 3½ times as large as it was in 1870. But the national production, measured in dollars of constant purchasing power, was 10 times as large at the end of the period, and industrial output had increased 35-fold.

In the meantime, the average number of hours of factory workers had been reduced from about 63 per week in 1870 to less than 49 in 1940, while average hourly earnings had more than trebled in dollars of constant purchasing power. This "real" weekly or annual wage in manufacturing had doubled over the 76-year period, even though the workweek was cut by 38 per cent. This was made possible chiefly by a tremendous increase in the quantity and quality of the manufacturing facilities which were provided in American manufacturing industry. Manufacturing capital investment per worker was multiplied by 8 times over the period in question. But the

return per dollar invested, while it has fluctuated widely between good years and bad, showed no general upward trend over that portion of the period for which measurement is practicable.

Incentives in American Manufacturing

There has been, historically, a remarkably consistent pattern in the division of the realized income from the expanding manufacturing output of America. Reliable statistics are not available for as far back as 1870, but from 1899 through 1938 the average share of wages and salaries has been 82½ per cent against 17½ per cent as the share to investors (including dividends, interest, rents, royalties, and non-corporate profits). There have been, from year to year, relatively minor divergences from this pattern of distribution, but there is no discernible trend during the period away from the averages cited.

It is suggested that the persistence of the average 17½ per cent share of realized income from manufacturing that was maintained for the 40 years preceding World War II may represent the proportion that is needed to produce the dividends, interest, rents, royalties, and non-corporate return that will provide for the continuing investment upon which an expanding productivity such as we have had in the past depends. At any rate, it would seem reckless to depart too radically from such an established pattern at a time when unprecedentedly large private capital investment is counted on to make up for the drastic curtailment of such investment during the war years, and to carry us to the new high levels of civilian production set as our postwar goals.

The Distribution of Manufacturing Income in War

At the beginning of the war, the Government adopted controls and a tax program designed to prevent wartime activity from resulting in un-

just swollen private returns. Due primarily to huge volumes, the profits before taxes of manufacturing industry were very high, but throughout the war its profits-after-taxes averaged returns no longer than they had been in good prewar years. Relative to volume, they were considerably lower than in prosperous years in the past. Again, there can be no complaint at results that generally were in accord with a national wartime policy.

But it is fair to note that the wages of manufacturing labor were allowed to increase substantially during the war. Between January 1, 1941 and April, 1945, average weekly earnings per worker increased by 37 per cent. This was, in considerable part, a result of increased working hours and a shift from low- to high-paid industries; but straight-time hourly earnings on the same jobs increased about 40 per cent against a cost-of-living rise of about 30 per cent.

The net result was to alter drastically the 48-year relationship of the 17½-82½ per cent division of Realized Income from Manufacturing. The share of wages and salaries increased to over 90 per cent, and the investment share shrank to less than 10 per cent.

Its Postwar Distribution

This wartime shift in the proportion of distributive shares has an important bearing upon current wage controversies. With union demands for wage increases ranging up to 30 per cent, and the economists of the Office of War Mobilization and Reconstruction asserting that an average increase of 24 per cent is feasible without raising prices, it is pertinent to inquire how such increases would affect the prewar ratios that governed realized income distribution in manufacturing.

Forecasting is always hazardous, but if we assume (1) that in 1946 we shall reach the \$100 billion level of national output which the Government proponents of general wage increases expect, and (2) that there will be little increase in productivity because of the continuing process of reconstruction, and (3) that the Government will succeed in carrying its announced purpose

to maintain present price ceilings, it appears that a 24 per cent general wage increase would reduce the share going to capital from 17½ per cent to 11 per cent even allowing for its increased return resulting from the repeal of the excess profits tax. The prewar ratios would be about maintained if wages remained at present levels.

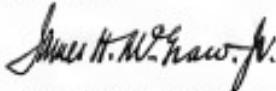
Conclusion

Since the maintenance of these prewar ratios was accompanied by an unparalleled rise in the "real wage" of American workers, there is a powerful prima facie case for act tinkering with them. It should be noted, however, that some economists think that the size of the investment share of manufacturing income tends to provide more capital than can be absorbed by a mature economy, and thus contributes to those breaks in the expansion of the economy which, as stated at the outset, have been its principal blemish.

Regardless of what may ultimately prove to be the validity of this view, no one can responsibly contend that at this early but crucial stage in the reconstruction process is the time to test it. Now, no one knows whether, or what dimension of additional wage increases can be supported without forcing up prices or reducing profits to a point that will discourage vitally needed private capital investment.

We want high and increasing wages in American manufacturing. We need them to provide an active incentive to workers to support expanding productivity, as well as to ensure the trend of rising living standards in America. Equally, we need a continuing profit incentive of sufficient attractiveness to call forth the new investment upon which expanding productivity depends.

We can never attain our dual objective if we push one of these aims so far and so fast that it defeats the other.



President, McGraw-Hill Publishing Co., Inc.



The plane that flushed an idea from a hot-dog stand —

WHEN all the improvements on today's planes, it seems strange to think that airplanes haven't always had parking facilities.

Back in the early days of flying, Eddie Stinson landed at a small field in Northwood Michigan with a passenger.

Ready to take off, Eddie found that his starting battery had gone dead. So he told his passenger to open the throttle just long enough while he started the motor by pulling the propeller through.

The motor started with a roar! The passenger, confused, had pulled the throttle with open. Eddie jumped clear as the plane roared down the field.

But dead ahead was a hot-dog stand that wouldn't jump!

The plane roared into the stand. At 1600 p.m., the propeller cracked instead of popping, but dog, and bone has a look

Only then did the passenger remember enough to cut off the ignition.

The hot dog stand cost Eddie Stinson \$100 plus a new propeller that it showed him a way to make planes better.

Two days later he had rigged up a parking brake to operate with levers on landing wheels.

Years of flying showed Eddie Stinson what he needed and designed a plane. Stinson first showed his biplane back in 1925, was a plane ahead of its day. Besides biplane, it had an enclosed cabin, an electric starter, and a radio locator.

Eddie Stinson has always been a leader; you can depend on Stinson to bring you the best in quality planes.

Answering: THE STINSON VORAGAR 280... Here's a fine plane ship that will bring you speed, style, and comfortable air travel.

And air travel luxury such as you have never seen before, except with longer, more expensive planes!

The Voyager 280 cruises at 125 m.p.h., has an maximum speed of 135 m.p.h., and a range of 200 miles. Its proven maneuverability, and high altitude performance make it a versatile plane anywhere.

And the appointments of the Voyager 280 match its performance. Its cabin is spacious and comfortable. You'll be in comfort on its newly upholstered adjustable seats.

And economically, too! The costs of operating the Voyager 280 will compare favorably with the cost of operating your car.

Write for a free illustrated brochure telling all about the Voyager 280 — it comes from Stinson Consolidated Vultee Aircraft Corporation, Wayne, Michigan.



Stinson

EASY TO BUY... EASY TO FLY

Brian Dillen, Consolidated Vultee Aircraft Corporation, Wayne, Michigan

AVIATION NEWS • January 14, 1946

SPECIAL AIR SERVICES

CHARTER

NON-SCHEDULED

INTRASTATE

BUSINESS BOOMING

At Least 12 New Freight Lines Expected Soon on West Coast

Air terminals receiving flood of inquiries from organizers in search of base facilities; potential shippers ready to fill all cargo planes which become available.

Availability of surplus C-47s and private aircraft may be expected to induce the appearance on the West Coast at up to a dozen new non-scheduled air freight enterprises within the next few months.

All terminals are receiving a flood of inquiries from organizers of such companies, including manager, ship and tie-down facilities.

► **Airports**—With an eye on business which undoubtedly will develop between the United States and Mexico, Long Beach Municipal Airport and Los Angeles Airport possibly will receive port of entry designation within the year.

There is every indication in the Southwest, and in Los Angeles and Long Beach, that air freight carriers can fill as many C-47s as they can obtain with perishables for eastern markets at rates ranging from 15 to 25 cents per ton-mile. Whether the lure of this market will lead to a disastrous overloading of hidden ground operating costs remains to be seen.

► **New Services**—One of the most recent freight-airlines to start flight operations is Pacific Air Cargo Co., headed by H. J. Gremmels, and based at Los Angeles Airport. At the same airport Los Angeles Air Service has begun operations as a charter company using a C-47 for either cargo or passenger hauling.

Seeking space at Los Angeles Airport is a third company, National Air Cargo Corp., headed by J. S. Jenkins, managing director, whose operations is typed.

► **Prospects**—"I could use today any number of cargo planes and my company could lay its hands on 20 C-47s our negotiated rates, dependent on volume and our shippers to sign written load contracts, will range from 15 to 25 cents per ton-mile," he says.

"A 3000-mile cross-country trip

Airborne Orchids

Grown and imported from Mexico and Central America, the West Coast believe that within the span of a few months practically all of their domestic shopped consumers will be growing them.

They foresee the chambering of entire planes for special "orchid flights" cross country in meeting seasonal demands for the luxurious flowers.

► **Markets**—Restaurants of commercial air service to Mexico, including the Mexican Institute of orchid shipments, and more than one distributor in nearby Florida is considering the use of chartered planes to harvest and market orchids from Mexico and Central American jungles.

States to fly perishables out of places where which can be served by plane but not by heavy transport planes."

Principled hazard of such non-scheduled operations, and one that few legitimate operators seem to consider, is the case with which potential profits may be leveled and even dropped until red ink by informal and unscrupulous competitors.

► **Headache**—While the small non-scheduled company is not confronted with the heavy overhead of regular airlines, which must maintain large ground crews and build-



READYING NEW PLANES

National Shipyards Freight Corp., expanding its non-scheduled air freight operations, has contracted with North American Aviation, Inc., for modification of six of five surplus C-47s which the firm purchased recently. North America has turned to modification of military transports to use a portion of its war-expended factory space and labor force. Shown here, as the first C-47 soon turned over for modification, are (left to right) George Mribitye, NAF maintenance chief, Gary Brok, North American supervisor, Robert King, NAF chief radio technician, and Thomas Hopwood, NAF chief engineer.

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SPECIAL AIR SERVICES — 27

ing facilities at regular landing places, from various cost benefits by the very lack of such a service organization.

Weather is a serious business risk in that the non-scheduled air freighter may be forced to put down at an airport which has little or no refueling or maintenance equipment. If servicing facilities are available they are likely to be primarily for the use of aircraft needing the equipment, or owned outright by the airlines.

► **Cargo**—The non-scheduled freighter is subject to the delay of receiving services which need to be regular airline rates give it a competitive edge. The shipper would be having to pay extra prices for fuel and oil, and top prices for maintenance and repairs when obtainable.

A minor accident and repair job easily may cause a trip contract, from the time developed in movement of manufactured goods or from the standpoint of storage in shipment of perishables. With one and two-plane companies the effect of a weekend accident surely will delay enroute power indefinitely in the light of the present scarcity of flyable equipment.

It is also possible that recognition of these factors accounts for the apparent unwillingness of scheduled air carriers over the threat of non-scheduled encroachment on their business.

► **Passenger**—However, some air terminal managers are concerned over the surging expansion of non-scheduled services, and they foresee the inability of their airports to provide space for the new passengers using the airports.

Also, one Southern California air terminal manager said he does not wish the situation to develop that his terminal would become an air freight customer regarding the performance ability of non-scheduled companies using the airports.

He reported that during the past week he has received 25 inquiries for space from prospective non-scheduled operators, but will enter into no verbal agreements until the prospective carrier has given satisfactory showing of his company's financial stability and operating ability.

► **Responsibility**—He told AVIATION NEWS:

"Air freighting economists have become so glibious that it becomes every air cargo manager to protect the air freighter and investor alike against a non-scheduled company that conceivably may be organized wholly as a short-term stock jobbing venture."

Matson Line Keeps On Its Toes

SEAL kept on the schedule with strict punctuality, will continue Navigation Air with similar standards through an overall aircraft and maintenance service at Oakland, California, the nucleus of an air-line operating organization.

In the meantime, T. A. Bailey,

Matson's president, will continue the threat of air enforcement against

the company's rich Hawaiian fleet

by advertising the consequences

of shipment losses and sent

aboard Matson surface liners.

► **Plane**—Matson Air Transport Division, headed by T. A. Schmidt,

began during the war with the acquisition of Hazel Air Transport Service planes, will begin normal modification and overhaul with an investment of \$100,000 in new tools and equipment, and will employ two bureaus at Oakland Airport.

The representative of Matson's "switch

and working" for the time when the shipping may gain a certificate to

fly to Hawaii as a company public

ity release states that "pilots and

other flight personnel" are mainte

nated on the personnel roster of

the Oakland Airport operation.

Farmers, Air Industry Urged to Cooperate

Most promising field for initial development of air cargo is in the field of agricultural products. Eugene E. Wilson, chairman of the Aircraft Industries Association, be

lieves, who also is vice-chairman of United Aircraft Corp., told a dinner meeting of the National Council of Farmers Cooperatives that farmers and agriculture, working together, can in the near future revolutionize food and produce marketing for the benefit of the whole nation.

► **Cooperation**—The two should act together to speed development of air transportation to create additional employment and income, as well as contribute greatly to national security. Wilson said, adding that the truck industry had accomplished the impossible during the war and should now cooperate to equally vital postwar objectives.

"Agriculture and agriculture already have completed experiments which demonstrate that with the cooperation of government, farmers, shippers and the truck, great increases in the volume of fresh item produc-

tion shipped by air are to be ex-

pected in the near future," he said.

"For example, it has been authoritatively estimated that about third of the fruits and vegetables shipped from out of the great Western States are shipped by air. The air freight rate could be brought down to 10 cents per ton mile if a feasible plan is ad-

opted," he added.

designed for the job of carrying farm produce."

Wilson suggested that agriculture and aviation should work with Congress to remove taxes and other barriers to steady development of transport types especially needed for the air cargo job.

National Skyway Freight Increases Fleet to 11

Addition of five surplus C-47's to the National Skyway Freight Corp. fleet, and removal of operations and maintenance base from Long Beach to the Los Angeles Municipal Airport, has been announced by Robert W. Prescott, president.

All five planes are being modified as cargo carriers, with insulation, thermoset heat control and double air cargo doors. Two of the planes are being converted at North American Aviation Corp.'s new modification plant at Glendale, California. The remaining three are being converted at Globe Aircraft Corp. [2] Worth, Texas.

► **Fleet**—With the new planes, the fleet, also known as the "Flying Tiger Line," will have eleven planes

Canadian Transport Board Schedules Two Hearings

The Canadian Air Transport Board will hold hearings in mid-January on applications for commercial non-scheduled charter services applied for by Leavens Bros. Ltd., Toronto, for a service out of Leamington, Ont., to anywhere in Canada, Newfoundland and the United States, and by Aircraft Industries of Canada Ltd., Montreal, for a service to any point normally within a radius of 500 miles of Montreal.

► **Hardline**—He listed an important among factors now retarding a re-

Give 'em plane facts!

We're continuously giving 'em plane facts, because Mechanix Illustrated has the kind of readers who expect facts. They want details, too—the kind of down-to-earth truth that comes in handy when they're up in the air. They go for such a full-page item as "Sky Supreme" in the December Mechanix Illustrated—it's a quiz on map symbols and airway signs. A professional, an amateur or just an air-craze grounding can get the answer if he doesn't know it. But there's plenty more in that December issue—including clear photographs of Goodyear Aircraft's new fighter plane which goes upstairs at 7,000 feet a minute—and a full-color picture article showing how student mechanics learn the complicated fuel and hydraulic systems of the Douglas C-54 . . .



Even more of our business is going our readers the newest—first. The "Tying wing" (pictured at right) for example, is just being tested now. But our informative article, complete with photographs and reduced diagrams, has already been read by the men who bought the December Mechanix Illustrated—and judging from their response, we may publish something in "Something New on the Wing"!

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PERSONNEL

PRESIDENT A. TOLMAN NAMED SALES DIRECTOR OF EAL

PRESIDENT A. TOLMAN has been appointed director of sales for Eastern Air Lines. Tolman, 45, has been released from the Marine Corps and returns home to New York. His service was with Eastern for seven years in the traffic department. Tolman subsequently will be at the EAL's main office in New York.

M. F. BEALE, personnel manager of the Clark & Webster Aircraft Corp. at Montreal, has been appointed managing manager of Hawker Siddeley and Propellers division of United Aircraft Corp., succeeding James F. Jeffery who has resigned. Beale formerly held the position, having joined Hawker in 1945 and leaving to go to United in 1944.

Capt. A. FISHER has been assigned by the Civil Aviation Administration to the Bureau of Safety and Research. He will remain with the Bureau until Dec. 31.

Gen. C. R. BELTON, Comptroller, Comptroller General Command and consultant to the government of Central and South America on airport construction problems. Fisher will be stationed at Belton, Costa Rica. He recently completed a year's tenure for the CAA in Costa Rica and Venezuela, where he advised on airport problems.

Three New Appointments Are Announced by CAA

John Estes (left) has been appointed deputy chief of the technical development division of the Civil Aviation Administration. He is returning to CAA after three years with the Whiting Corp. where he was

Frank C. Barker has been appointed superintendent of communications and ground operations for Northeast Airlines following a consolidation of the ground operations and communications departments. This post was created to coordinate communications and security and to promote closer cooperation. Barker joining Northeast in 1946 Barker was with National Air Transport and Eastern Airlines.

Justin K. Loing has been appointed by the General Petroleum Corp. as its aviation representative for Oregon

director of development. Board S. Jenkins (right) has been appointed as chief of the airport development section and Joseph Baum has been named assistant to the general sales officer.

Marshall Russell has been appointed eastern division public relations director of Agusta-Aldrich Systems with headquarters in New York. He succeeds Peter J. McDonald, who returned to the firm's general public relations for Aldrich-Russell Co., advertising agency. Russell is a former newspaper man and served as a public relations expert with Pan American Airways.

Lt. Col. Harry K. Miller, an aviator leave from the Air Transport Command, has been appointed superintendent of operations for Air Cargo Transport. Miller, 40, has extensive experience in the Army Air Corps and in the Army. The M-114 is his assistant supervisor of maintenance operations.

John Atkinson for eight years before he was a sales representative for Eastern Air Lines.

H. M. Wales has been named sales manager of aviation electronics equipment for the Western Electric Co. Division of General Electric Co.'s Electronics Department. He will have charge of the GE product line of VHF plane radio, portable radio, direction finders, airborne VHF equipment and other aviation electronic products of this division. Wales, formerly with GE, was a pilot in the U.S. Air Forces.

E. C. BEASLEY has been named sales manager for aviation products for The Goodyear Tire and Rubber Co. Inc. Since his return to the States in August 1940 and was in charge of fuel tank development for Goodyear during the war.

J. M. Shultz, senior district traffic manager for British Airways in Florida before returning to the U.S. in April, has joined the American Air Transport Corp. as traffic manager for the airline. He joined British originally in 1938 and the same year was appointed traffic manager for the airline. Captain Shirley was an attaché to the British agents in Washington as chief of plane space control for the North Atlantic wing, east coast and later was appointed executive officer of the British wing for priorities and traffic.

Justin K. Loing has been appointed by the General Petroleum Corp. as its aviation representative for Oregon



TWA VICE-PRESIDENT:

Brig. Gen. James C. Holmes, who figured prominently in some of the most dramatic and controversial discussions in a number of General Eisenhower's staff, and who has been named a vice-president of Transoceanic & Western Airlines, is a major figure of international repute in his connection with the military's aircraft operations.

and Southern Maine. He will aid commissioners in the development of air routes. Having previously was airport manager and chief pilot for the Lanes Island of Aeromaritime, Louisville, Ill.

Julia Benson Hopkins formerly estimator for the board of governors of the Federal Reserve System, announced her recent resignation to take charge of the POC in charge of preparation of local legislation in tax and aviation law, with offices in Washington.

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TRANSPORT

U. S., Britain Begin New Attempt To Resolve Air Transport Fight

Each apparently envisions Bermuda conference as set as ever on having its own way, however, and firmly adhering to the stand-point it held when Chicago session ended.

The United States and the United Kingdom will attempt in the Bermuda civil aviation conference opening tomorrow to end the controversies that presently threaten to split the world into two warring spheres of influence in the field of air transport.

They have tried before on several occasions, notably at the Chicago civil aviation conference in November-December, 1944, and indications are that this time each party begins negotiations as definitely determined on having its own way as ever.

U. S. Commission—The United States, anxious to redress the balance of power established around the globe, is in no frame of mind to make concessions to Britain that might later be generalized into multilateral negotiations which would tend much of that country's success in date in setting freedom-of-the-

air. Britain, unable to amass services for several months, has nothing to gain by haste and in a strong bargaining position, as even Americans themselves acknowledge. To this end agreement for partial controls on at least the airlines between the United States and the United Kingdom.

British Commission—Although the two countries went to toward compromising their differences during the course of the Chicago conference, indications are that they enter the Bermuda conference with all sorts of strict particular adherence to its final program at Chicago.

Thus the United States will: (1) oppose frequency controls, (2) oppose any kind of formula designed to divide carrying capacity, (3) seek "segregated" application of the Fifth Freedom of the Air and (4) probably will take the position that if route controls are to be instituted at all, it should be the function of carriers and not of governments.

The British will reiterate their

contentions that "international competition" must be eliminated. They would accomplish this through frequency regulation, adjustment of seating space to traffic offering, fare controls and tight restriction of the Fifth Freedom, if they succeed in all this.

Atmosphere—The foregoing leaves out of account, however, one extremely volatile factor in the Bermuda picture, that is, the possibility conflicts of Chicago are not likely to be present that time. The strong differences persist but lack of good will seems to have disappeared or at least to have diminished to a point where it is negligible.

To emphasize the United States intention to retain the maximum degree of bargaining power, the Civil

Commissioners

American Col. George P. Baker, head of the Office of Transportation and Commissioners policy in the



EAL TRAVEL AGENTS MAKE 1946 PLANS:

Regional travel representatives of Eastern Air Lines sat at New York recently to talk about 1946 travel trends and importance of coordination to travel agents. Left to right around the table are: George F. McNeil, manager of EAL's Travel Department, who called the meeting; Max Gruber, Cooke Cook of Boston, New England Division agency manager; Charles Becker of New York, Northern Division agency manager; Frank Minns of Detroit, Great Lakes Division agency manager; Fred Scheuer of Miami, Southern Division agency manager; Thomas White of New York, agency representative; and Leo F. Coffey of Chicago, Central Division agency

The Wreck of ADER'S "AVION"

(Suppose men had quit trying after that)

Clément Ader, the Frenchman, built this first aircraft for the French War Ministry in 1897. Held a ton in weight, the "Avion" had four-bladed propellers driven by two 25 h.p. Deacon engines. A strong wind was during the first year—so strong that it blew the Avion off its landing gear. The plane, upon hitting the ground, killed itself before crashing. Whatever its sins, Ader left the ground—and the spirit—alive.



THE AVION was an aviator's nightmare. Impulsive fliers avoided many lessons from the behavior of that early flying machine—and, with added knowledge, were too inclined to build better planes.

That progressive process has never stopped. Through the years Northrop has been a part of it, contributing many an aviation "first" to produce better, safer and more efficient airplanes.

For instance, in 1930, the Northrop "Alpha" set the record time in a women's race. The first all metal, aerosol-skinned monoplane with multi-bladed wing warping, flew across the U.S.A. in 22 hours. Yet "Alpha" would not in 1934—by that time Northrop's "Glenayre" was pioneering the streamlining and flying

the same distance in less than 12 hours.

Even the revolutionary planes of war (including Northrop's own P-38 "Lightning") are no longer "news." Soon you'll be seeing the *Northrop Flying Wing*. A huge seaplane without fuselage or tail, a design that is nearly all "new."

This abolishing the old and improving the new is one thing that most concern. For better aircraft may help preserving various sources their price. And better aircraft can help accelerate prosperity through cheaper, safer, faster world travel and commerce.

The job ahead for aviation is still big. So big, in fact, that it can be accomplished only by an industry that continues to be strong and progressive.



Steve Dernieroff; Garrison, Norton, deputy director of the Office; Stanley Morgan, chief of the Department's Aviation Division; L. Welsh Fogart, CAFS chairman; George Ross, Morris Isaacs and John Ladd, CAFS members; and George Neal, CAFS general counsel.

British Air Minister Sholto and L. J. Dunn of the Civil Aviation Ministry, N. A. J. Chastain, of the Foreign Office, Major J. S. Macmillan of British Overseas Airways Corp., and Sir Henry Self and Peter Mansfield of the British diplomatic representation in Washington.

Awards—The Terrotors' conference—in addition to attempting to settle the executive questions outstanding between the two countries—will consider commercial use of military air bases built with American funds and materials on British soil during the war. These include the 65-year lease bases in the Western Hemisphere as well as a number of other important ones around the world.

In a formal statement, Baker said last week that the two countries "appear to be split" on "imperial issues," but he was confident that the same overall approach will bring a satisfactory agreement in civil aviation as was accomplished in telecommunications five weeks ago.

Prisons—American sources reported last week that they expect that the large majority this country is having in winning adherents to freedom-of-the-air is continuing to return to re-examine its opposition.

Later, addition, according to Prague reports, to the P-51 Freedom fighters was Czechoslovakia which reportedly signed a mutual agreement last week. Turkey, which had ratified the Convention on International Civil Aviation, is reported about to sign a similar agreement.

Buffalo to Intervene

Bursting from post policy, the City of Buffalo will formally intervene in aviation matters affecting it when CAB hearings are held within the next few weeks. Corporation Counsel Fred C. Maloney has announced Corporation Counsel Casimir T. Pertyka, Buffalo's legal expert on aviation and airport matters, will testify.

Maloney said he will make a thorough study of the city's post policy of not intervening in CAB hearings on citizen applications.

Land to Take Over At ATA Jan. 16

Skies plan for vacation after leaving stagione post; Ranswick already on job.

Rusty S. Land plans to go to work as president of Air Transport Associates Jan. 16, day after his resignation is effective as chairman of the Maritime Commission and Administrator of the War Shipping Administration.

He would like to take a little time off, he told AVIATION NEWS, but "they've waited for me long enough."

At ATA it was said the presidency was offered the retired vice admiral at least two months ago. Acceptance hinged on White House permission to have withdrawn from the Maritime Commission and WSA. The resignation was accepted two days ago, effective Jan. 15.

At Board—Land will go to the Association as a neophyte, to use his own words, but his record shows that he is far from entering a new field. He learned to fly at Naval Air Station at Pensacola, Fla., and Anacostia, D. C., in 1922, and was a naval aviator and observer. From 1928 to 1930 he was vice-president and treasurer of the Guggenheim Fund for Promotion of Aerospace, and from 1933 to 1938 was a member of the Army and Navy Helms Board and National Advisory Committee for Aeronautics. He was assistant chief of the Bureau of Aeronautics from 1936 to 1938.

It appeared last week that Land would be one of the first to nominate an ATA officer to go on the job. Robert Ranswick, former Georgia representative in Congress, held his first industry meeting last week as the Association's new executive vice-president when plans were mapped for ATA participation in the recent air mail conference with Post Office Department officials.

A Arnold—William W. Arnold, new aviation and engineering vice-president, was in the hospital with the flu and it looked as though some time might go by before he is able to start work. Arnold recently joined the Army where, as brigadier general, he was acting chief of staff of the Air Transport Command.

The Association will meet more space and accommodate its present personnel, several new and executive staffs of its new executives, and increases under its expansive program.



Robert Ranswick

grain (AVIATION NEWS, Jan. 13). Hence it has found an eight-story building near its present headquarters.

Expectation is that ATA will be using two floors of the building by Feb. 1, and probably all of it by April 1. Some of the departments are finding space as the new quarters are available, while others, including the executive offices, will remain where they are until the final move.

Administration Building Planned at Seafair

The Port of Seattle at Seattle, Wash., expects to call bids in February or March for construction of a \$20,000,000 administration building at the Seattle-Tacoma airport, built during the war by the Civil Aeronautics Administration.

Plans call for a five-story reinforced concrete structure, 158 x 578 ft., plus two-story office wings and a one-story 384 x 138 ft. garage. The building will be of steel frame construction, with a thermal insulated roof covering system, structural treatment, fireproof and dust-proof elevators, insulation and fire doors.

TCA Rate Ruling

Trans-Canada Airlines rates between Victoria and Vancouver were raised Jan. 1 to equal those of Canadian Pacific Airlines. CPA rates a load service, while TCA is permitted to carry local traffic between the two cities on transcontinental basis because of the aircraft shortage. The rate increase was made by the Canadian Air Transport Board at Ottawa, as proposed by CPA against lower TCA rates, after an investigation of operating cost.

Realistic Approach to Problems Characterizes Airmail Meeting

Post Office Department, CAB and airline officials confer in Washington to discuss study of possible revenues if all first class mail were carried by plane.

By MERLIN MICHEL

A new, active and realistic approach to domestic air mail problems characterized last week's Washington meeting of Post Office Department, Civil Aeronautics Board and airline officials. Specifically, it was the first conference of all three groups to discuss the situation.

The fact it was called by postal officials was seen as encouraging evidence of the department's recognition of the increasingly close-mail relationship between its responsibilities and those assigned in the Civil Aeronautics Act, which states that the Civil Aeronautics Authority shall consider "the management and development of an air-transportation system properly adapted to the present and future needs of the postal service."

Early in the discussion, the Post Office desired to suggest CAB and the industry with a study completed by Inspector George R. Miller, showing the effect on postal revenues of carrying off all first class mail by air, at varying rates of postage, possibilities of carrying parcel post by air, international postage rates and related subjects. It was the first time such detailed information had been made available.

Opposition to the meeting position is that the time all first class mail will go by air, but even the Post Office Department officials, generally thought to favor such a move, made no prediction as to when that time might come. Miller's data demonstrated that the profit on first class mail has been effected a de-

advertising posting air schedules, and similar devices.

► **Facilities**—Miller told the 159 persons who packed the hearing room that facilities for handling mail are adequate at any two of the 26 airmail fields now used. He selected 39 points for principal fields and suggested secondary facilities at 174 more.

Decreases in the number of airmail planes were advocated by Lt. Gen. Harold L. George, commanding general of the Air Transport Command, who said he wants to see a great air transport fleet as an "asset to air power."

56 Seats Provided In PCA C-54s

The converted C-54s being placed in service this month by Pan American-Central Airlines will provide a seating capacity of 56 passengers with 22 seats on one side of the aisle and 34 on the other.

Bear will of the cabin has been carved about 5 ft. 6 in. At the front there are seven baggage compartments. Coat racks are at the deck. Two long wall niches from each bulkhead. Men's and women's restrooms are back of the cabin. Cabins also contain reinforcement of the floor structure, and installation of barreled floors, a new cabin heating and ventilating system, standupwing and cabin lighting. Seats will have individual reading lights, and there are heat ventilators and parcel racks. Cabins are being equipped with an oxygen high pressure system.

► **C-13**—Pan-PCA is putting 15 of the planes into service at a conversion cost of about \$200,000 each. The first jet will be ready by January if they ordered another. Pan American urged appropriate airmail handling facilities at airports, and, further, air mail, was proposed that the department consider all forms of priorities, especially by local postmasters, and a program of



Floor Plan of 56-Passenger DC-4 Drawing showing layout arrangement of Pan American's converted C-54s. Numbers refer to (1) baggage compartment, (2) lavatory, (3) instrument panel, (4) cockpit, (5) passenger seat, (6) doorway, (7) luggage compartment, (8) buffet, (9) ladies' room, (10) men's restroom, (11) steward's locker. Eight rows of passenger seats accommodate three each in 28 seats each.

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Flexible Feederline Patterns Are Urged

CAB New England Area Council segment highlighted by New York Post Authority panel.

Establishment of flexible local air service patterns in the New England area was urged on CAB last week by the Post at New York Authority.

The proposed hub-and-spoke argument in the New England Area case, meant to reach the board by decision. Board members displayed interest in methods of defining such patterns.

► **Suggestions**—Based on the idea of some type of air service for all communities of substantial size, the Post Authority, in the case at instance, said the pattern should include:

► **Parter** service linking towns of reasonable size with transline connections.

► **Minor** service linking cities and towns in a local region with those centers where community of interest lies.

► **Hub-and-spoke** linking major traffic generating centers with major aviation and recreational areas.

To effect "non-hub-and-spoke" service at the many communities, the authority suggested issuance of "flexible certification" giving the operator leeway as to exact communities to be served on particular trips and allowing him to adjust service to seasonal and other variations in demand.

► **Danger**—Citing a view expressed by Board Member Donald Hays on the danger of sister companies competing through subsidies regulation, the Authority contended that CAB would be foolish if it pays inadequate attention to development of local service.

Examination in the case here recommended Wiggins Airways of Newberg, Me., for three-year temporary certification for route between Southern New England, Colorado and the permanent extension of ATC to the Northeast Airlines for a route from Burlington, Vt., to Portland, Me., via intermediate points, on a three-year trial basis (AVIATION NEWS, Dec. 8).

► **Plan**—Wiggins and the Commonwealth of Massachusetts, in-service, planned for five-year temporary certification, contending that three years would be insufficient to demonstrate feeder service potentialities. They also requested the board that a five-year basis for

Surplus Allocations

Two dozen airmail planes from the surplus Property Administration in the 3d allocation in all 28 four-engine and three two-engine planes were allotted.

These included 12 to United and two to Northwest. Pan American also received one C-46. A C-45 cockpit PCA aircraft at an earlier, passenger version of the C-47 was allocated to Civil Aeronautics Administration.

► **Transports**—From C-54s went to the Netherlands Government, two to the Netherlands Indies Government, two to Charles A. Chapman, New York City, whom they will convert and hand them over to Pan American, Inc., for use as freight for the passengerless two in Latin American Airlines, and one to The Boeing Corp. One C-45 was allocated to South African and one to Air Portugal.

► **Equipment depreciation in category**

Skymar Corp. of Providence, R. I., proposing nonstop service exclusively, argued that suitable equipment is as yet in the market as available before the Board's decision. Removal of the upsurge in costs, Skymar said, would be to "the important advantage of early equipment."



TCA PUTS LOHAN IN SERVICE

TCA is using LOMAN radar equipment as an trans-Atlantic Lancaster transports. The Long Range Navigation equipment allows accurate flights of well over 800 miles from the transatlantic stations in degree and over 1,160 miles at night, with better-than-optical accuracy. Photo shows a LOMAN receiver in use by a TCA navigator on a trans-Atlantic Lancaster.

Examiners Barron, Frischke and Joseph Farnsworth made a second denial of Skymar's application, however, on the grounds that telephone would not be available "within a reasonable time."

Braniiff Buys 18 202s, PCA Orders 15 More

Additional orders for 22 Marlin 202s totaling around \$740,000 were announced last week. Fifteen will go to PCA for approximately \$33,360,000 and 12 to Braniff Airways for more than \$4,000,000.

Braniff between the fifth engine to enter the twin-engine transport which is expected to be available early in 1947. PCA's order is a repeat, although by less than two engines. Braniff's order for 15, the first to be placed for the new Marlin which is especially designed for short-haul operations.

► **Total Orders**—The consolidations brought to 278 the number of 202s now on order, with total value close to \$33,360,000. Martin also is considering C-46s for both companies.

Elsewhere, Pan American Airways received delivery of the first of 12 Lockheed Constellations. The 45-passenger four-engine ship was flown down Lockheed's Venetian Field to Miami and turned to LaGuardia Field, New York. TCA expects to put it in service on the North Atlantic this month.

Bargaining Between ALPA, Airlines Seems Headed for Showdown

Operations present united front, most committee headed by Dawson to represent all in negotiations; offer of \$35,500 for ocean week turned down by pilots.

By BLAINE STURRISHFIELD

Bargaining between the airlines and ALPA, the strong Air Line Pilots Association, over pay and working conditions seems headed for a showdown.

The operators, presenting a united front in line of company negotiations, by agreement have appointed a committee headed by Ralph Dawson, president of American Airlines, to negotiate with ALPA, especially on flying compensated C-54 equipment in intercontinental service. The agreement has been filed, in accordance with law, with CAB, which will either approve or disapprove it. The Board may take some time in action, but this is unlikely.

► No Statement—Drew Bechtel, ALPA president, is reported to have declined comment at his Chicago headquarters, saying that release of information to the press on the negotiations was a breach of farm rules of the Air Transport Association and they would suggest to the airlines wage arbitration committee that it issue a clarifying statement at an early date.

Observers have predicted for years that when the supply of qualified pilots, forced by government expense for war, for certain airline operations, becomes scarce, there would take issue with ALPA, which has never been a closed shop, as strongly increasing salaries.

► Pilot Supplies—Thousands of discharged military transport pilots, qualified on two and four-engine equipment, are available, after refresher and route time, for airline service. Certain airline officials say they will hire these men, at rates much lower than those demanded by ALPA, unless a satisfactory agreement is reached.

They also say that they would get qualified overseas and superintendents in the cockpit if necessary.

Closed union drives in other industries are supported by a shortage of manpower, whereas the gains are based on sharp demands by the competition of non-union apprentices for the jobs.

► CAB Powers—CAB, in making rules for the airlines, has taken

agreements of various cost items, including salaries. Apparently there can be no stand on the basis that costs locally interfere with pay scales arrived at by collective bargaining under the Railway Labor Act, as provided by the Civil Aeronautics Act.

Nevertheless, more pilot pay affects the cost of aerial service, express services and the public interest is involved, as it is believed the Board could strongly influence conclusions in this controversy. On American's far foreign services, the Board has no rate authority except to prevent discrimination, preferential treatment, and so forth.

Arling officials confirmed reports that they had offered the pilots \$13,500 per year for intercontinental operations and \$12,500 for domestic service, and that these offers were not accepted and are now withdrawn. That negotiations by the newly-appointed committee presumably start from scratch except where contracts are in effect.

Then it was true that the pilots had asked for \$22,500 on international runs and \$17,500 on flights on domestic routes. That was for a one-year, annually renewable \$5 basic pay scale.

► Conclusion—The airline labor organization committee consists of representatives of American Airlines, Braniff, Eastern, United, TWA, and PCA. The airlines have given the committee power of attorney to act on wage contracts on all types of equipment, including DC-3's.

TWA officials confirmed reports that their trans-Atlantic operations have been held up more than 20 by failure to reach agreement with the pilots. One spokesman for another airline said that in his opinion the pilots are "willing to accept strike."

► Sacramento—It is understood that an agreement reached between the wage committee and the pilots, as pay scales for DC-4s will be retroactive to the start of negotiations. Presently the pay rate on TWA 307 derivatives is being considered as a yardstick.

Delta To Use Parsers

Passenger service aboard the new Boeing 747 will require twice the space to house its equipment. The change will include a parser or sufficient to fit the usual stewardess.

Delta says it will be the first use of a flight parser on domestic airlines. The passenger rate will underwriting, recovery for passengers, damage, flight, collection of tickets and landing of passengers, and supervision of loading and unloading of cargo and mail.

The Air Transport Command told Aviation News that in July it had 1,514 aircraft qualified to fly round-the-world flights. This included the very long range of 6,000 miles in September 1941. Douglas Alpha and an November 4,000. Probably 1,600 more have been discharged since the figures were compiled. This means that nearly 9,000 four-engine pilots, all capable of flying two-engined planes also, are out of service, and an unknown number of them seeking jobs. The Navy also has discharged several thousand, the exact figure not immediately available.

Discussion of Airports

Scheduled in California

The first attempt to develop a complete answer to all objections to airports will bring together area planners of two major West Coast seaports, Los Angeles and Orange, in a special meeting in Glendale, Calif., Feb. 18.

The conference has been called by the Planning Commission of Los Angeles County to determine what can be done to overcome opposition to airports. A portion of the meeting will be devoted to a round-table discussion between one or more airport opponents and airport proponents.

Sacramento Airport Vote

Sacramento, Calif., voters soon will vote on a \$250,000 bond issue which, with another \$300,000 to be provided by the Federal government, would be used to improve Sacramento Airport shortly to be restored to city use by the Army. Major improvements included removal of a remodeled administration building, buildings, ramps, sewers, water, electricity, waste haulers, garages and additional land.

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PICAO Resumes Work After Holiday Recess

The Navigation Committee holds first meeting of new year, invites council schedules first 1948 session for June 21.

In holiday recess over, the International Civil Aviation Organization set to work again in Montreal last week with the Air Navigation Committee holding the first of the new year's meetings.

It was devoted mainly to the reports of various technical subcommittees, now officially termed "divisions," which have been piling up steadily. Latest completed include those on search and rescue, landing and ground aids, rules of the air, and automation, man and chart.

Subdivisions—Other new subcommittees which will begin their meetings before the end of the month include those on personnel and licensing, accident investigation, formulation of international air transport, and airline operating practices.

PICAO's Interim Council will hold its first meeting of the new session June 21.

Fresh from a trip to Dublin, London and Paris to prepare for regional conferences on air navigation facilities, Lt. Edward Warner, Council president, held a press conference at which he announced officially that the North Atlantic Conference at Dublin would begin March 4, to be followed by the European negotiations in Paris on April 5.

Under Task—It was expected that about 160 delegates, advisers and staff would attend the Dublin meeting, Lt. Warner said, and "considerably more" at the Paris discussions. They will probably last two or three weeks.

Major task of these conferences—the North Atlantic mostly commercial air transport on this continent—is to arrange for the continued operation of air navigation facilities set up during the war for military needs. This will include detailed plans for commercial transport and post-war work out a plan for continuation of aspects of their upkeep.

Operations—In view of the fact, as expected that the areas in which particular systems are located will undertake the operation and rear maintenance of establishments such as weather shops on the high seas and meteorological stations in Greenland however, must be shared



TWA Transaction:

Principals in TWA's recent sale of \$10,900,000 in 3 percent ranking debentures to the Equitable Life Assurance Society were Mrs. Margaret Peffer Koenig, left, assistant secretary of TWA, and Miss Helen S. Dillay, vice-secretary of Equitable. The money will be used largely for purchase of 26 Constellations. In addition to being the first firm to make a large-scale commitment program, TWA has financed with a long-term financing loan of this type, one transaction in history to be the first of such size in which two women executives signed the papers.

by all the states in proportion to the interest involved.

The PICAO route service conference, as they are to be known, also will have to decide on procedures for publication of navigation charts, standards for publications in their final form and anticipated future development. Above all, they will arrive, through application of PICAO standards and recommended practices, for world unanimity.

Reading, Penna., Schedules Airport Improvements

Reading, Penna., has increased its appropriation for airport improvements in 1948 by \$100,000 because of anticipated expansion in commercial and civilian flying. The initial budget was set at \$110,000.

City council recently engaged Gilbert Associates, Reading engineers, to draw plans to convert the field from "90 percent military installation to a 50 percent commercial installation."

The Reading Army Air Field, which averages most of the airport, has been placed in inactive status and all military planes removed. Lt. Col. Frank H. Barber, commander, announced.

designed by the Air Transport Association, Cutrell suggested two automatic direction finder beams—one 5,500 ft. and the other 4½ miles from the end of the runway, and development of a traffic holding point to be flown by all arriving pilots. GAA proposed a radio altitude system incorporating advantages of the vertical radio beam runway locator, curved horizontal radio beam side path, and radio compass to permit landing an aircraft despite low-lying obstacles. Both stressed need for adequate high intensity approach lights.

Dispute—All of them are on ATA's program, but not all are agreed by Civil Aeronautics Administration. ATA, for example, wants ADIF outer beams, new sheet 5 miles out, brought to a spot 4½ miles from the airport on approacher paths and fly a tighter pattern. American, too, has its own ideas about landing in a fog, instantaneous beacons and glide paths. But AFA finds approach helio systems inadequate and wants ADIF landing distance so adjusted the machine CAA believes the landing stations are not always necessary, though at recognition to the field for safety, runway locations and site factors more and higher in-

teracy approach and runway lights, all of which are part of its program.

Plans are being made to experiment with approach and runway lighting, as well as other landing developments at Chicago airport in cooperation with ATA, CAA and the city of Chicago.

Monro Lashes Out Against Integration

C. Beale Moore, president of CAA and vice-president of Air Transport Association, stuck out last week against proponents of integration of the various forms of transport in a speech in which he described the Association of American Railroads as "that powerful group of skilled lobbyists and political leaders."

The AAR, he said, has provided the "most determined and insidious opposition" to the federal airport development plan.

AFA pointed out that the Transportation Association of America, "the Charles McCarthy of a powerful and astute railroad industry," is working for the integration of transportation, which Moore called "actually a honey-trap."

DOWNPAYMENT:

A \$10,000 downpayment for Pan American's Juanita Diana King airplane base at Miami is remitted by James E. Young, PAA manager (left), and J. E. Cherry, Miami City manager. The city is buying the base, which includes a terminal building and three hangars, for \$166,000, and will convert it into a pilot center.

SAC Session Hears Weather Discussions

Airline representatives warn against hasty revision of current instrument landing procedures.

Methods to alleviate air traffic jams and bad weather delays at airports were discussed at last week's meeting of the Society of Automotive Engineers in Detroit by John F. Gill, chief check pilot for Eastern Air Lines, and E. A. Cutrell, who returned to American Airlines last week as supervisor of flight development. Both are stationed at LaGuardia Field.

Gill explained that any improvement based on present air navigation and traffic control systems must necessarily be a temporary expedient since future traffic volume will require much closer flights on airways than current facilities can tolerate. Therefore, he feels an entirely new approach to the problem may be necessary, with "interlocking solutions" achieved through principles of radar and television.

"Wicked Thinking"—Cutrell asserted that current talk of automatic landing of commercial aircraft by radio, radar or electronics is "wicked thinking." He believes that visual landings must continue, with more attention given terrain approach and runway lighting installations from the pilot's viewpoint.

In their talks at SAC's Air Transport session, both proposed modifications along the lines of these

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EDITORIAL

Chaos At Miami

If the shocking lack of organization marking the Miami All-American Air Manufacturers serves as a lesson to every other city contemplating an air show, perhaps it was all worth while after all.

Any event of such size requires an unbelievable amount of planning and work. The loyal and willing Mississippis appointed only a few days earlier to their various tasks labored commendably. But an experienced leader with organizing ability, in constant control of a swiftly moving and rapidly appointed staff, simply did not exist.

There was no single show headquarters where top executives could be contacted by their own organizations or the press. Top executives did their own legwork, and could seldom be found. They kept the program in their pockets making changes by the minute until the events actually were started.

Individual committees operated valiantly, but usually independently, on their own.

No one counted registration, no one knew how many lightplanes had arrived, no enclosures were ever made to reporters. A friendly attorney was named publicity chairman.

Private fliers who were making financial sacrifices to reach Miami were offered \$39 or \$53 hotel rooms miles away on Miami Beach. Special arrangements with hotels for Air Manufacturers visitors appeared never to have been thought of. Regular rates were in effect generally.

The Transportation Committee functioned well but arrangements at the giant airport put the hundreds of visiting lightplanes far from the stands. Both the parking areas and stands were far from regular transportation. Spectators were away from the planes and were discouraged from walking along the edges of the caged area to admire the variety of shapes.

The contrast with the planned and smoothly functioning Oklahoma City annual classic and Birmingham air shows was pathetically glaring. Miami needs a Steely Acton and a Stanley Draper.

The Customer Is Never Right

America Aircraft Corp. is making an effort to correct the wide variation in quotations made by operators for repair and overhaul. A

material has been compiled for its dealers and operators listing suggested flat rates. The operator checks the time needed for any job, multiplies it by the hourly rate charged, adds the cost of materials, and totals the cost of the work before it starts.

While many operators will disagree with the efficacy of such a system, the fact that one of the nation's leading lightplane manufacturers is tackling the problem, rather than deplored it, is worthy of a note of encouragement.

Why so little is being done throughout personal aviation to give more attention to complaints of private plane owners is one of the mysteries of the industry. The attitude that the customer is never right can wreck the revenues the operators receive already. Wiping it out is an important today as more airports and better lightplane designs are to expansion of personal flying tomorrow. Scores of returning veterans setting up their own small bases and fighting for business please take note.

Recognizing a Friend of Aviation

The New York Times and its publisher, Arthur Hays Sulzberger, have been awarded the Frank M. Hawks Memorial Trophy in recognition of their contribution to the development of aviation. The action will be applauded by the aviation world.

Comprehensive, dependable coverage is nothing unusual for the Times, but close observers in aviation have noted this distinguished newspaper's unusual attention to aviation both in the amount of space devoted to it during the newsprint shortage when thousands of dollars of advertising was being rejected and in prominence of display of each stories, frequently on the most competitive front page in American journalism.

The Times' intelligent optimism on the future of U.S. commercial aviation has been outstanding. To Mr. Sulzberger: The editor does not make fitting reference to Times writers Reginald Cleveland, Fred Graham, and John Ward who have written so many aviation stories and editorials in recent years.

Russell H. Wood



FOR THE Personal Plane Operator...

AN IMPORTANT NEW PRIMARY INSTRUMENT

An air driven Attitude Gyro, built under the same high standards as the well-known Sperry Directional Gyro and Gyro-Harmonic, has been developed by Sperry Research and is now available. This instrument can be used on any airplane where present operated instruments are manually operated.

The name "Poor Fredman" in

"Flight" which Sperry's electric Attitude Gyro is giving to pilots of military and transport aircraft—freed from aging, tumbling, misinterpretation, fatigue—are now at the fingertips of the private plane operator.

Pattern indication (the same by day or night) gives the pilot a quick, visual picture of his attitude. Write our demands. Depart-
ment for further information.

at all times...confidentially, at any flight angle, regardless of visibility or turbulence.

Sperry's Model P-3 Attitude Gyro is of small standard size, light weight (57 lbs.), and low initial cost. Its simplicity of construction means reduced maintenance cost.

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IT'S HERE for all planes—the same super power that boosted U. S. fighter-bomber performance—in a great new Mobilgas Aircraft!

It's Flying Horsepower—a new kind of gasoline performance that gives commercial and private planes faster take-offs, climbs, speeds.

Flying Horsepower climaxes 13 years of Socony-Vacuum research

— is the result of world's greatest catalytic cracking program.

Get NEW Mobilgas Aircraft and you get the greatest flight power you've ever known . . . Flying Horsepower!

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